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STATE OF INDIANA.

Department of Public Instruction.

TWENTY-FIRST BIENNIAL REPORT

OF THE

State Superintendent of Public Instruction

FOR THE

School Years Ending July 31, 1901, and July 31, 1902.

TRANSMITTED TO THE GENERAL ASSEMBLY
JANUARY 15, 1903.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1903.

STATE OF INDIANA.

TWENTY-FIRST BIENNIAL REPORT

OF THE

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

STATE OF INDIANA,
DEPARTMENT OF PUBLIC INSTRUCTION,
SUPERINTENDENT'S OFFICE,
ROOM 27, CAPITOL.

INDIANAPOLIS, January 15, 1903.

To the Senate and House of Representatives:

GENTLEMEN—I herewith transmit to the Legislature the twenty-first biennial report of the State Superintendent of Public Instruction, as required by section 5838 Burns' R. S. 1894, the same being section 4410 R. S. 1881.

I have the honor to remain,

Your obedient servant,

FRANK L. JONES,
State Superintendent of Public Instruction.

Disposition of this Report.

The law requires that ten thousand copies of the biennial report of the State Superintendent of Public Instruction shall be printed and distributed in the several counties, that one copy be placed in each township library. These are all the provisions concerning its distribution. For the disposition of the remainder, it is suggested to the County Superintendents, to whom these reports will be sent, that they be disposed of as follows:

One copy to County Auditor.

One copy to each County Commissioner.

One copy to each Trustee, whether of township town or city.

One copy to each newspaper in the county.

The remainder as demands may indicate, to teachers, school directors and other citizens.

School officers are respectfully reminded that it is their duty to preserve all educational reports, copies of the school law and school journals, and to transmit them in good condition to their successors in office.

STATE OF INDIANA.

Department of Public Instruction,

ROOMS 27, 28 AND 29, CAPITOL, INDIANAPOLIS.

DEPARTMENT REGISTER, 1901-1903.

FRANK L. JONES, STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.
WILLIAM A. LOWER, DEPUTY STATE SUPERINTENDENT.
FRANK D. HESTER, DEPUTY.
CLYDE D. WOODFILL, DEPUTY.
WILLIAM H. CHRISTENA, JANITOR.

I. Introduction and Recommendations.

(a) Introduction.
(b) The Wages of Teachers.
(c) High School Inspection.
(d) The Transportation of Pupils.
(e) Equal School Privileges for all Children.
(f) The Transfer of Dependent Children.
(g) Schoolhouses.
(h) The Qualifications and Training of Teachers.
(i) Laws Which Should Not Be Amended at Present.
    (1) The Compulsory Education Law.
    (2) The Transfer Law.
    (3) The Township High School Law.
(j) The School Book Law.

Introduction and Recommendations.

(a) INTRODUCTION.

By an act of March 6, 1865, it is made the duty of the State Superintendent of Public Instruction to report to the General Assembly. The part of the Act which sets forth the items upon which the report should be based follows:

"At each regular session of the General Assembly, on or before the fifthteenth day of January, said Superintendent shall present a biennial report of his administration of the system of public instruction, in which he shall furnish a brief exhibit: First. Of his labors, the results of the experience and observation as to the operation of said system, and suggest the remedy for observed imperfections. Second. Of the amount of the permanent school funds, and their general condition as to safety of investment; the amount of revenue annually derived therefrom, and from other sources; estimates for the following two years; and the estimated value of all other property set apart or appropriated for school purposes. Third. Of such plans as he may have matured for the better organization of the schools, and for the increase, safe investment, and better preservation and management of the permanent school funds, and for the increase and more economical expenditure of the revenue for tuition. Fourth. He shall present a comparison of the results of the year then closing with those of the year preceding, and, if deemed expedient, of years preceding that, so as to indicate the progress made in the business of public instruction. Fifth. He shall furnish such other information relative to the system of public instruction—the schools, their permanent funds, annual revenues, etc., as he may think to be of interest to the General Assembly. He shall append to said report statistical tables, compiled from the materials transmitted to his office by the proper officers, with proper summaries, averages and totals appended thereto. He shall append a statement of the semi-annual collections of school revenue, and his apportionment thereof; and, when he deems it of sufficient interest to do so, he shall append extracts from the correspondence of school officers, tending to show either the salutary or defective operation of the system or of any of its parts; and shall cause 10,000 copies to be printed and distributed to the several counties of the State."

In compliance with this Act, the recommendations, statistical tables and information relative to the schools herein given, is respectfully submitted.

(b) THE WAGES OF TEACHERS.

On page 580, Table E, of this report is given a statement of the wages of teachers from 1897 to 1902 inclusive. It will be noted at once that the wages for the fiscal year ending July 31, 1902, are considerably higher than in previous years. This is probably due quite largely to the operation of the Teachers' Minimum Wage Law enacted in 1901.

It would be difficult to set out all of the advantages of the wage law—it has increased the demand for male teachers, placed the minimum wage more or less upon the bases of scholarship and successful experience; protected good teachers against competition with incompetence and given County Superintendents the legal support they have needed in the careful and accurate grading of teachers' manuscripts.

When it is considered that teachers are employed only one-half to three-fourths of the time and are often required or advised to attend higher institutions of learning during vacation periods, it certainly can not be held that they receive sufficient pay to attract the most promising young men and women to the profession; at least it must be said that the ablest young teachers are constantly looking toward other professions as a means of permanent livelihood. More than 20 per cent. of our entire teaching corps each year is made up of new and inexperienced teachers. Should we not hold our ablest teachers in the profession if we can do so by legislation or otherwise? I respectfully ask the General Assembly to continue the wage law in its present form so that it may have a period of four years, at least, in which to test its strength and weakness. A careful inquiry into the matter of the public's attitude toward it, justifies the statement that it has been accepted as a decided step forward in the educational work. The law has not been given a fair test, for the reason that the expenditures for the last fiscal year were made upon the basis of levies fixed prior to its enactment, and not anticipating the increase in wages.

(c) HIGH SCHOOL INSPECTION.

By an Act of the General Assembly of 1865, it is made the duty of the State Board of Education to "take cognizance of such questions as may arise in the practical administration of the school

system, not otherwise provided for, and duly consider, discuss and determine the same." Growing out of this somewhat indefinite delegation of authority in school matters is a system of annual inspection of high schools and the issuance of high school commissions. Indeed the system has been in vogue so long and the authority of the Board so generally recognized that the citizens of the State and local school boards accept the advice and requirements of the State Board of Education as mandatory.

On pages 657 and 658 of this volume are given the requirements of the State Board of Education in the matter of commissioning schools; on page 658 and following is the prescribed course of study; on page 681 and following is given the list of 182 high schools now under commission.

The annual inspection of these schools and others applying for inspection is a great work and requires more time than the members of the Board can give to it. It is, therefore, urgently recommended that the State Board of Education be given authority to appoint a High School Inspector whose duties and compensation shall be prescribed by the General Assembly. In consequence of the above it would be possible to reduce the annual appropriations for the State Board of Education by $1,000, which sum increased by $2,500 annually appropriated would cover the salary and expenses of the inspector. The large annual expenditures for the maintenance of nearly 800 high schools in Indiana together with the importance of having qualified teachers in these schools makes the problem of supervising them of great importance. (See pages 643 to 722.)

(d) THE TRANSPORTATION OF PUPILS.

The most important movement in the administration of educational affairs in this country is the one leading to the consolidation of schools. The abandonment of a large number of small rural schools leads at once to the transportation of the pupils of abandoned districts to other schools, usually to a central school. The whole subject of consolidation and transportation is discussed fully in Section IX, page 725 of this report. This movement has assumed such large proportions that it can not now be called an experiment. One hundred and eighty-one wagons are transporting

2,599 pupils at public expense in two-thirds of the counties of Indiana. Other states are doing quite as much. The attention of the General Assembly is respectfully called to the expressions of school patrons upon the subject. There is no law, either affirming or denying the right of a school officer to transport pupils at public expense. It has been sufficient in most cases to extend a trustee's grant of general powers in the statutes to cover all matters of ways and means—including the right to provide a transportation system. The following opinion by this Department was written more than one year ago and has been accepted very generally throughout the State:

"1. It has been conceded for many years, both from the standpoint of the statutes and from the standpoint of custom, that township trustees have almost unlimited powers and rights to organize their schools and supply them with teachers, erect schoolhouses and provide in every way necessary for the conducting of schools in their respective townships. Whenever the courts have considered questions in relation to the trustee's duties they have invariably held that he has practically unlimited power within the resources of the township; that he shall determine the policy of the schools, the length of the school within certain limits, the kind of schoolhouses to be erected, etc. Furthermore, in the Acts of 1899 and also in the Acts of 1901, page 514, it is required that school trustees shall take charge of the educational affairs of their respective townships, towns and cities, and that they shall establish and locate conveniently a sufficient number of schools for the education of the children therein and that they shall provide apparatus and appliances for the further organization of their schools. In the use of the words 'locate conveniently,' the trustee finds a basis for very wide discretion. Just what constitutes 'conveniently' is a difficult question. When the trustee builds a walk from the front door of the schoolhouse to the edge of the school grounds and again builds a walk along the front of school property, he is making the school property 'convenient' or accessible; or if he should determine to build a walk across the road or to construct a ditch for a few feet to drain certain parts of the school lot so that pupils might have access to the building, he is making the schoolhouse 'convenient' as regards location; therefore, why not convey the pupils as a matter of convenience? And if he has the right to effect a

thorough organization why is not transportation of pupils as much a part of organization as the construction of walks, or the putting of a bell on the schoolhouse to inform the pupils of the approaching hour for the beginning of the school work? The law does not say that he shall build walks, but they are necessary and come under the head of conveyances or appliances which exist in the thorough organization of the schools. If he shall take charge of the educational affairs it is he who is to determine what shall constitute legitimate educational affairs and to so effect his organization that education may be obtained with ease and convenience. In other words, under the general duties of the school trustee he has the right to effect a thorough organization as he sees in his official capacity the necessity for such, and the statutes do not undertake to determine explicitly and definitely what these duties shall be. A statute is never all-comprehensive.

"2. In the Acts of 1899 the legislature recognized the right of the trustee to transport pupils without placing the obligation upon him to do so, therefore, it matters not whether the Acts of 1899 were repealed or not. Neither does it matter at this present date whether the Act of 1899 was constitutional or not. It is generally known that the Act was defective for the reason that it did not make the proper statement as to the amendment of the Act of 1897, but the Attorney-General, in an opinion given to me, states that the Act of 1899 is not unconstitutional and that the omission of a few words in the title of the Act or in the enacting clause does not operate to make the Act unconstitutional but merely defective. The recognition of the right to transport pupils was made in 1899 and, therefore, it should be conceived by all citizens that this fact, coupled with the further fact that his general duties are not defined, guarantees the trustee's right to transport pupils at public expense.

"3. By the Acts of 1901, pages 437 and 514, it is clearly provided that when a trustee abandons a school he shall provide for the education of the children in some other corporation. It is unreasonable to hold that he could force their attendance for great distances; therefore something must be done to bring about or effect shorter distances. This can be accomplished only by transportation.

"4. The practice of transporting pupils at public expense is a

fact in nearly one-half of the counties in Indiana. In one county it has been so for ten years. So far as I know the County Commissioners have always conceded the right and have, without question, accepted the report of a trustee upon items of expense in this connection. It is therefore a custom or common and undisputed practice throughout the State.

"5. If it is sought to restrain the trustee from transporting pupils at public expense, it becomes the duty of the 'party prosecuting' to show why the former can not; in which event the whole contention would be that the statute does not specifically grant the right. This argument applied to any one of a hundred acts of any officer of the Nation, county or township and sustained by the court, would result in chaos and would destroy wholly the doctrine of implied powers. The theory of our government, national and local, has been that the granting of power to formulate policies and the charging of certain duties, carry with them the power of adopting such means, not prohibited by the constitution or statutes, as are fairly conducive to the end. Transporting pupils is not forbidden and is useful and necessary to meet the ends of the statutes in regard to consolidation, and further, is a measure of economy.

"In conclusion, I will say that there would be as much reason for asserting that the trustee can not purchase a bell for his schoolhouse, or nails with which to repair his property, or an encyclopedia or supplementary reading of any kind whatsoever, for the statute does not name each and every article which he is to purchase, as to assert that he can not convey pupils at public expense. His grant of power under the head of 'general duties' should be construed to cover the entire case."

In order that there may be definite legal sanction and legislative direction of a movement so great and so important, I recommend that a law be enacted, giving a definite grant of power in this connection to school officers and making it necessary under certain conditions for school officers to provide conveyances for children living at great distances from school.

(e) EQUAL SCHOOL PRIVILEGES FOR ALL PUPILS.

The State has always assumed the right to control and direct the educational affairs of the State, upon the broad principle that it must protect and fortify itself in good citizenship and in an

enlightened population. The State prescribes a minimum term of six months, limits local school levies to definite rates and fixes a State school tax levy. Under these circumstances it is impossible for many municipalities in the State to maintain a term adequate to the needs of the pupils or the demands of the State. Eighty townships did not, and many of them could not, with levies placed at their limits, maintain six months of school during the last fiscal year. It necessarily follows that a short term of school is found where there is a low average of wealth, where the soil is poor and other natural resources not abundant. Is it not desirable, at least, for the State to give ordinary, not to say extraordinary, opportunities to those young people—future citizens—who are denied the chance to make a highly profitable living on account of a dearth of natural resources? It seems to me that any other view than this would lead to the encouragement and enforcement of both poverty and ignorance or the removal of the State's citizens from the poorer communities to more thrifty sections. The State should at least pay the price of a good education to have its poorer lands occupied and kept under cultivation. These corporations pay low salaries, own poor schoolhouses and of necessity get the poorest teachers, with few exceptions. I realize the difficulties incident to a distribution of the school fund upon any other basis than the enumeration of school children; however, an annual appropriation of a few thousand dollars or the use of say one-half of the State's revenues from liquor licenses might constitute a "Fund for the Relief of Poor Municipalities" to be apportioned among those townships by a commission, consisting of the Governor, Auditor of State and the State Superintendent of Public Instruction, in such amounts and under such restrictions as the General Assembly might impose. It should be the first duty of this commission to satisfy itself upon the points of a corporation's having done its best to support the schools before aid is granted. The attention of the General Assembly is respectfully called to Table C, pages 578 and 579 of this report, showing that the State's participation in school affairs was only seventeen cents more per capita in 1902 than it was in 1880, while the participation of municipalities, in a local way, has increased from $3.18 per capita in 1880 to $7.78 in 1902. This is not a good commentary upon the interest of the State in the growth and development of the State's educational

affairs. The entire burden of making improvements in the common schools, establishing high schools, erecting sanitary schoolhouses, installing modern equipment and manual training, and providing for kindergarten instruction has been borne by the people through local taxation. This is indeed a perfect illustration of the bit of Biblical philosophy that "unto him that hath shall be given but from him that hath not shall be taken away even that which he hath."

I earnestly recommend your careful consideration of this condition, and the voting of relief.

(f) THE TRANSFER OF DEPENDENT CHILDREN.

The matter of educating children living in custodial institutions has been before the school officers of the State for many years. There has not been uniformity in the practice. The important question involved is, "who shall pay for the education of dependent children in custodial institutions?" The Attorney-General, Secretary of the Board of State Charities and the State Superintendent of Public Instruction wrote an opinion as follows and advised procedure in accordance with it. I respectfully request that the General Assembly incorporate the main features of this opinion in an Act so that the practice may be uniform and legal:

"In the matter of the education of dependent children in the orphans' homes of Indiana it is held by the Attorney-General, Secretary of the Board of State Charities and the Superintendent of Public Instruction, that the following is the proper practice: First, all dependent children in such institutions should be enumerated where they are at the time the enumeration is taken whether it be in the children's own townships or in the custodial institutions; second, dependent children should be educated by the township trustee or school board in the corporation in which the orphans' home is located; third, a transfer certificate should be issued for each dependent child in an orphans' home, educated out of its own corporation; fourth, each school corporation thus transferring a child or children should be credited at the end of the school year on its transfer account to the amount of the annual per capita distribution made by the State Superintendent of Public Instruction when such children have been enumerated in the

orphans' home; fifth, account should be kept by the orphans' home of the time each child is an inmate during the school term and the same reported to the proper school officer at the end of the school year. This will make it necessary for the school officer transferring a child to pay only for the time the child was actually a school resident of the corporation to which he was transferred. In the event of the transfer of a child from one orphans' home to another, a new transfer certificate should be obtained. Procedure as above can not work a hardship upon any school corporation inasmuch as it becomes responsible for the education of its own children and gives to the school officers, having orphans' homes in their corporations, funds from outside of their corporations with which to educate the dependent children.

(g) SCHOOLHOUSES.

The vital statistics of the State point to the schools as the probable orgin of many diseases, particularly those of the pulmonary organs. We have hundreds of badly constructed and poorly heated and ventilated schoolhouses. Very little can be done toward the improvement of buildings already constructed. It is possible, however, to prevent the erection of unsanitary schoolhouses in the future. The General Assembly is asked to consider this matter to the end that all plans and specifications shall be first submitted to a competent person or persons who shall pass upon the sanitary features provided for in them. New York State appropriated money to be given in prizes for the best plans and specifications for different classes of schoolhouses all plans submitted in the contest to be the property of the State. This method has many points of merit and is submitted for your consideration.

(h) THE QUALIFICATION OF TEACHERS.

Below is given a table showing the qualifications of teachers in Indiana. The point of greatest interest in this is the fact that so many teachers are without professional training. It can not be successfully maintained that these untrained teachers must be dropped from the schools and trained teachers put into their places for the reason that trained teachers can not be had. It is important, however, that all teachers be given good opportunities to take

professional work in a school or schools for the training of teachers. The State should provide not only ample accommodation for professional training but the same should be made convenient and accessible. The arguments for the establishment of another State Normal School are made in a printed pamphlet and will, in due time, be placed before you. There is, therefore, no occasion for the printing of that matter in this volume. It is sufficient to say that the following table and the testimony of the school officers of the State show that we are greatly in need of more trained teachers and that the State should be greatly concerned in seeing that ample provisions are made for this training.

QUALIFICATIONS OF TEAC

Compiled by Frank L. Jones,

Number.	COUNTIES.	Number of Public School Teachers in County.				Number of Teachers who are Graduates of Colleges or Universities.				Number of Teachers who are Graduates of State Normal Schools.			
		Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.
1	Adams	100	15	23	138	2	1	4	7	.	2	2	4
2	Allen	182	10	161	353	5	6	35	46	1	1	10	12
3	Bartholomew	111	13	43	167	2	2	8	12	3	1	5	9
4	Benton	87	35	.	122	4	8	. . .	12	.	3	. . .	3
5	Blackford	49	.	52	101	.	.	4	4	.	.	6	6
6	Boone	134	18	28	180	1	3	6	10	5	7	3	15
7	Brown	76			76	1	.		1	. . .	. . .	. . .	. . .
8	Carroll	136	11	13	160	2	1	1	4	3	2	4	9
9	Cass	125	9	66	200	3	1	12	16	8	1	10	19
10	Clark	118	22	45	185	2	4	10	16	.	. .	5	5
11	Clay	130	27	30	187	2		2	4	1	2	7	10
12	Clinton	130	19	41	190	15	2	7	24	25	3	9	37
13	Crawford	79	17		96	.	. .	.			2		2
14	Daviess	134	16	37	187	.		7	7	1		1	2
15	Dearborn	87	16	41	144		1	6	7			2	2
16	Decatur	106	9	29	144	4	.	3	7	.	.		
17	Dekalb	94	28	31	153	2	4	7	13	1	1	1	3
18	Delaware	164	19	98	281	10	1	16	27	3	1	7	11
19	Dubois	123	13	14	150	5	3	.	8	1		1	2
20	Elkhart	142	22	115	279	2	. .	8	10	16	2	6	24
21	Fayette	48	3	25	76	. . .	.	5	5	1		2	3
22	Floyd	44	4	75	123		. .	2	2	.	.		
23	Fountain	123	.	42	165	3	.	9	12	12	.	8	20
24	Franklin	87	16	.	103	5	4	.	9	6	1		7
25	Fulton	116	24		140	8	7	.	15	6	7		13
26	Gibson	157	12	34	203	2		8	10	3	. .	5	8
27	Grant	139	55	100	294	14	20	20	54		10	50	60
28	Greene	135	44	25	204	2	4	1	7	2	3	4	9
29	Hamilton	143	36	29	208	5	10	5	20	.	4	3	7
30	Hancock	114	8	27	149	1	1	4	6	4	2	1	7
31	Harrison	145	23	. . .	168	8	9		17	1	2	. . .	3
32	Hendricks	130	15	. .	155	2	1	. . .	3	8	2	.	10
33	Henry	117	55		172	3	14	.	17	7	5	. .	12
34	Howard	104	9	54	167	3	1	9	13	2	1	4	7
35	Huntington	110	27	54	191	1	3	9	13	7	2	25	34
36	Jackson	122	18	28	168	.	2	3	5	1	2		3
37	Jasper	112	11	16	139		5	6	11	1	. .	5	6
38	Jay	119	11	41	171	2	1	5	8	.		.	. . .
39	Jefferson	109	8	42	159	4	1	7	12	4	. .	3	7
40	Jennings	95	4	13	112	2	.	2	4	. . .	1	.	1
41	Johnson	102	20	25	147	6	5	5	16	2	2	1	5
42	Knox	155	5	41	201	5		8	13	10	1	3	14
43	Kosciusko	148	33	20	201	4	2	5	11	7	2		9
44	Lagrange	101	18	. . .	119	2	3	.	5	1	1	. .	2
45	Lake	118	39	87	244	. . .	9	8	17		4	9	13
46	Laporte	136	3	64	203	4	1	8	13	12	1	30	43
47	Lawrence	119	11	32	162	. .	. . .	2	2		1	2	3
48	Madison	152	42	180	374	3	4	50	57	2	9	40	53

HERS, 1902–1903—INDIANA.

State Supt. Public Instruction.

Number of Teachers who are Graduates of Private Normal Schools.				Number of Teachers who have Studied one or more years in Normal Schools, Colleges or Universities not including any in columns 1, 2, 3.				Number of Teachers who are High School Graduates, not including those in 1, 2, 3, 4. (Report in this column only graduates from three or four year High School Course.)				Number of Teachers who have had no training above Common Schools, Local Normal Schools or Small High Schools.			
Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.
5	1	1	7	6	5	5	16	8	5	8	21	79	1	3	83
25	3	40	68	30		50	80	50		26	76	71			71
3	1	10	14	63	7	4	74	19	1	15	35	21	1	1	23
				64	24		88	19			19				
3		3	6	5		31	36	4		5	9	37		3	40
10			10	86	10	12	108	23	2	8	33	5			5
				50			50					25			25
4	1	2	7	62	3	5	70	25	6	1	32	36			36
14	2	8	24	60	2	25	87			11	11	40	3		43
10	4	5	19	42	10	10	62	5	4	15	24	59			59
1	1	2	4	97	20	8	125	1	2	9	12	28	2	2	32
15	5	5	25	30	7	15	52	40	2	5	47	5			5
1	3		4	10	1		11		4		4	68	7		75
15	1	2	18	98	13	12	123	14	2	15	31	6			6
	2	1	3	2	3		5	22	8	24	54	73			73
4			4	54	6	5	65	23	2	21	46	22			22
	4		4	27	10	5	42	8	3	6	17	56	6	12	74
7	3	7	17	43	3	30	76	47	3	35	85	54	8	3	65
16	4	2	22	30	4	11	45	13			13	58	2		60
14	6	17	37	15	5	13	33	72	7	58	137	23	2	13	38
		3	3	15	1	8	24	18	2	6	26	14		1	15
15	2	3	20	27	2	12	41			60	60	2			2
18		6	24	46		5	51	19		14	33	25			25
3			3	27	5		32	17	1		18	11			11
2	3		5	60	18		78	16	8		24	3	2		5
75	4	10	89	68	3	10	81		2	3	5	10			10
20	10	20	50	100	10	10	120	5	5		10				
4	2		6	55	15	12	82	25	20	8	53	47			47
4	4	2	10	29	12	15	56	97	4	3	104				
2			3	72	5	13	90	33		9	42	1			1
7	7		14	80	8		88	7	3		10	50	3		53
6	5		11	61	5		66	38	2		40	14	1		15
4	2		6	61	16		77	34	17		51	8	1		9
4			4	49	6	24	79	11		8	19	9			9
9	4	9	22	49	15	8	72	24	3	3	30	20			20
10	2		12	62	6	16	84	25	5	9	39	25			25
				49	5	6	60	44	1	2	47				
10	4	3	17	70	4	16	90	27	2	15	44	10		2	12
3		5	8	94	7	27	128	2			2	1	1		2
1			1	34	2	6	42	22	1	2	25	36		3	39
10	3	2	15	80	10	16	106	4		1	5				
6			6	65	2	20	87	22		8	30	47	2	2	51
7	2		9	49	16	7	12	34	11	8	53	51	5		56
4			4	33	6		39	48	5		53	14	2		16
7	10	21	38	10	6	8	24	56	6	30	92	45	4	11	60
20	1	20	41	80		6	86	14			14	6			6
15	3		18	50	5	4	59	10	2	20	32	44		5	48
				124	26	87	237	23	3	3	29				

QUALIFICATIONS OF TEACHERS,

Number.	COUNTIES.	Number of Public School Teachers in County.				Number of Teachers who are Graduates of Colleges or Universities.				Number of Teachers who are Graduates of State Normal Schools.			
		Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.	Townships.	Towns.	Cities.	Total.
49	Marion	152	. . .	710	862	6	. .	103	109	3	. .	*382	385
50	Marshall	136	29	20	185		3	5	8	.	2	2	4
51	Martin	97	14		111		3	.	3		1	. . .	1
52	Miami	130	12	52	194	4	3	12	19	5	2	1	8
53	Monroe	104	16	44	164	2	.	14	16	1		2	3
54	Montgomery	144	27	33	204	5	1	5	11	. .	9	3	12
55	Morgan	126	8	24	158	7	3	4	14	3		2	5
56	Newton	70	28	. .	98	1	8		9	2	3	. . .	5
57	Noble	101	17	28	146	2	4	12	18	6	6	10	22
58	Ohio	24		12	36	.	.	3	3	. .	. .	. .	. . .
59	Orange	93	22	. .	115	.	4	. . .	4		3	. . .	3
60	Owen	102	18	. . .	120	. .	5	. . .	5	2	1	.	3
61	Parke	146	24		170	3	9	. .	12	9	2		11
62	Perry	104	3	22	129	. .	.	2	2	.	.	1	1
63	Pike	92	44	. .	136	. .	. .	. . .		1	.	. .	1
64	Porter	83	34	33	150	.	2	1	3	.	.		. . .
65	Posey	116	10	23	149	9	5	10	24	2	1	4	7
66	Pulaski	97	31	. . .	128	.	4	.	4	1	2		3
67	Putnam	136	16	21	173	.	2	12	14	2	.		2
68	Randolph	143	12	36	191	10	2	6	18	16	3	8	27
69	Ripley	108	23	. .	131	. . .	1	. .	1	. . .	2	. .	2
70	Rush	108	8	22	138	. .	1	4	5	1	1	2	4
71	Scott	54	8	. .	62	3	3	. .	6	. .	.	.	. . .
72	Shelby	154	5	40	199	5	. .	7	12	3	.	7	10
73	Spencer	135	40	. . .	175	1	3	. . .	4	3	2	. . .	5
74	Starke	72	18		90	. . .	10	. .	10	. .	10	. .	10
75	St. Joseph	112	19	169	300	4	2	17	23	2	.	5	7
76	Steuben	100	20	. . .	120	3	2	. .	5	.		.	. . .
77	Sullivan	130	39		169	3	7	. .	10	4	2	. .	6
78	Switzerland	74	6	12	92	5	5	5	15	1	2	2	5
79	Tippecanoe	163	15	83	261	2	5	15	22	3	. .	5	8
80	Tipton	94	7	17	118	1	2	5	8	2	.	2	4
81	Union	41	6	9	56	. .	2	3	5	1	. .	1	2
82	Vanderburgh	89	. .	241	330	4	.	28	32	1	.	11	12
83	Vermillion	82	17	16	115	.	. .	4	4	1	4	5	10
84	Vigo	155	4	202	361	. . .	.	13	13	15	.	78	93
85	Wabash	149	20	52	221	20	8	10	38	10	3	5	18
86	Warren	76	19	9	104	. .	2	2	4	. .	3	1	4
87	Warrick	135	24	.	159	1	2	. . .	3	.	3	. . .	3
88	Washington	134	29	. . .	163	4	1	. .	5	4	4	. . .	8
89	Wayne	100	35	84	219	2	4	25	31	4	6	1	11
90	Wells	123	. .	25	148	3	. .	8	11	4	.	. . .	4
91	White	109	48		157	. . .	3	. .	3		8	. .	8
92	Whitley	94	14	18	126	. . .	4	3	7	1	1	3	5
	Total	10,394	1,660	3,980	16,304	261	269	655	1,185	280	177	817	1,274

*Includes the graduates from the Indianapolis Normal School.

1902–1903—INDIANA—Continued.

Number of Teachers who are Graduates of Private Normal Schools.				Number of Teachers who have Studied one or more years in Normal Schools, Colleges or Universities not including any in columns 1, 2, 3.				Number of Teachers who are High School Graduates, not including those in 1, 2, 3, 4. (Report in this column only graduates from three or four year High School Course.)				Number of Teachers who have had no training above Common Schools, Local Normal Schools or Small High Schools.			
Townships.	Towns	Cities.	Total.	Townships.	Towns.	Cities	Total.	Townships.	Towns	Cities.	Total.	Townships.	Towns.	Cities.	Total.
. .				51		118	169	64	. .	84	148	10	. .	. .	10
4	8	2	15	60	10	10	80	60	5	.	65	12	1	. . .	13
. .	. .		.	35			35	.	. .	. .	. . .	74	. .	.	74
. . .	9		9	50	6		56	40	10	30	80	40	. . .	. . .	40
4	2	6	12	40	6	24	70	20	5	1	26	37	3	. .	40
10	5	1	16	84	12	13	109	41		11	52	4	. . .	. . .	4
3		. . .	3	74	5	13	92	32	. . .	5	37	7	.	.	7
1	. . .	.	1	41	16	. .	57	13	. . .	.	13	12	1	.	13
9	5	3	17	23	2	5	30	37	. .	.	37	22	. .	. .	22
.		1	1	9	.	2	11	4	. . .	10	14	9	. .	. .	9
14	5	. .	19	34	6	. . .	40	18	3	. .	21	27	1	.	28
1	1	.	2	33	6	.	39	10	2	. .	12	56	3	. .	59
9	1		10	5	6	.	11	25	.	.	25	14	1		15
1	.	3	4	5	.	3	8	2	.	3	5	96	3	10	109
2	7	. .	9	2	3	. .	5		4	. .	4	92	25	.	117
29	12	6	47	31	16	6	53	21	6	20	47	. . .	. .	.	. . .
3	1	1	5	19	6	10	35	12	3	8	23	15	1	2	18
2	.	. .	2	20	5		25	17	7	.	24	5	. . .	. .	5
30	2	. . .	32	61	12	6	79	26		3	29	17		. . .	17
. .	. . .		. .	60	10	30	100	25	8	20	53	3	. . .	. .	3
1	1	.	2	30	6	.	36	1	. . .	.	1	31	4	. . .	35
4	2	2	8	74	4	9	87	8	. . .	5	13	21		. . .	21
5	1	. .	6	5	.	. .	5	7	3	. .	10	34	1	. .	35
9	. . .	2	11	17	3	15	35	40	2	6	48	80	. . .	3	83
8	3	.	11	6	34	. .	40	12	3	.	15	75	13	. . .	88
. . .	. .	. . .	. .	63	8		71	7		. .	7	2	. .	. .	2
10	2	10	22	50	10	70	130	30	3	55	88	16	2	12	30
8	6	. . .	14	38	8	.	46	48	4		52	3	. . .	.	3
2		. .	2	22	5		27	24	4		28	75	21	.	96
5	2	4	11	5	5	10	20	10	5	10	25	4	4	4	12
1	. .	. .	1	39	5	38	82	79	5	25	109	39	. . .	. .	39
2	. . .	1	3	24	2	2	28	18	3	4	25	47	. . .	3	50
2	2	1	5	14	1	3	18	20	1	1	22	4	. . .	. .	4
. .	. .	8	8	43	. .	28	71	33		139	172	8	.	27	35
5		. .	5	50	10	7	67	21	3		24	5	.	. .	5
. . .		14	14	38	3	81	222	. . .	. .	16	16	2	1	. .	3
16	8	12	36	88	12	41	141	140	20	52	212	.	. .	. .	. . .
4	. .	.	4	43	7		50	14	2	4	20	15	5	2	22
4	. .	. .	4	59	6		65	8	10		18	63	3	. . .	66
24	4		28	37	3		40	10	5	. .	15	55	12	. . .	67
5	2	5	12	49	22	18	89	33	1	35	69	7	. .	.	7
1	. .	. . .	1	53		16	69	32	1	.	33	30	. .	. . .	30
5	4		9	38	19		57	62	12	.	74	6	. . .	. .	6
9	2	2	13	41	7	6	54	39	. .	4	43	4	. .	. . .	4
659	206	294	1,165	4,236	656	1,161	6,053	2,231	294	1,025	3,550	2,437	158	123	2,718

(i) LAWS WHICH SHOULD NOT BE AMENDED.

The Compulsory Education Law, the Transfer Law and the Township High School Law have been before the General Assembly during each of the last three sessions. These laws are generally satisfactory. I recommend that they be continued without change for another period of two years.

(j) THE SCHOOL BOOK LAW.

The School Book Law is in the main quite satisfactory. It has stood the test of thirteen years of use and incidentally several adoptions, revisions and other changes of texts. The State is saved the great annoyance and expense of frequent and local changes. Uniformity, low prices for school books and well-graded series have been secured by the law. The only amendment which seems proper at this time is one looking toward the selection of better readers for the first three grades. The prices paid for these books are too low to secure the best books in the market. We have a two-book series in Physiology under the present law. Inasmuch as one book in this last subject will suffice I recommend that the Elementary Physiology be dropped from the list at the expiration of the present contract and that the price of the First, Second and Third Readers be increased ten, five and five cents respectively. This will not increase the cost of the entire set of books to the children of the State, but will distribute the amount now paid to greater advantage. The Readers are the most important books in the beginning grades and should be attractive and modern.

II. Publications of the Department.

1. State Manual (1901-1902). See Biennial Report 1900. (Same.)
2. Outline of Township Institute Work, 1901.
3. Arbor and Bird Day Program, 1901.
4. Outline of Township Institute Work, 1902.
5. A Course in Nature Study for the Common Schools of Indiana, 1901. (Committee Report.)
6. A Symposium: What Shall be Indiana's Next Steps in Educational Progress? (Before the State Teachers' Association, 1901.)
7. Arbor and Bird Day Program, 1902.
8. High School Course of Study, 1902. (See High School section of this Report.)
9. Directories, Bulletins and Letters (not printed in this Report).

TEXT-BOOKS USED IN COMMON SCHOOLS.

(Adopted Texts.)

	Retail Prices.
Fifth Reader—Indiana Series (revised)	$0 40
Fourth Reader—Indiana Series (revised)	30
Third Reader—Indiana Series (revised)	25
Second Reader—Indiana Series	15
First Reader—Indiana Series	10
Complete Arithmetic—Cook-Cropsey	45
Elementary Arithmetic—Cook-Cropsey	35
Advanced Geography—Frye	75
Introductory Geography—Frye	30
Advanced Physiology—Indiana Series	60
Elementary Physiology—Indiana Series	30
Spelling Book—Indiana Series	10
Hyde's Practical English Grammar	40
Hyde's Practical Lessons in the Use of English	25
American History—Montgomery	65
New Era Vertical Copy Books (1 to 6 inclusive), each	05
New Era Slant Copy Books (1 to 6 inclusive), each	05

2. Outline of Township Institute Work, 1901.

INTRODUCTION.

The law provides that the County Superintendent "shall hold one preliminary institute in each township in his county, before the opening of the schools each year, for the purpose of helping the teachers in the organization of their schools and giving any other needed assistance; but instead of holding such preliminary institute in each township, he may hold a joint institute for two or more adjoining school corporations."

The joint preliminary institute is recommended for the large counties in order that the County Superintendent may be able to attend all the meetings without unduly prolonging the work.

All duties for the preliminary institute should be assigned early by the County Superintendent, that the teachers may have sufficient time to make preparation.

It is recommended that the Trustee, with the advice and concurrence of the County Superintendent, appoint for the year an experienced and competent teacher to serve as Township Principal, whose duty it shall be to take entire charge of the institute work in the absence of the County Superintendent, serve as Chairman of the Program Committee, and carry out the instructions of the Superintendent and Trustee.

In preparing the following programs, effort is made to follow as nearly as possible the plans of the old outlines. We believe that the Township Institute is one of the strongest features in our school system, and that radical changes would tend to weaken rather than strengthen the work.

Carrying out the statement in the preface of last year's outline, we this year present six outlines in school sanitation and decoration and related subjects. These are subjects that in the last few

years have received much attention. Teachers, school boards and trustees are interested and are making much progress in them. The National Educational Association has offered $1,200 in prizes for essays on School Hygiene. Since the subjects are considered of so much importance by the best educators, every teacher and school official in Indiana should make a careful study of the outlines presented. The other book—Europe in the Nineteenth Century—is one of the best of its kind that has been published. It will certainly interest the teachers of the State.

For 1901-1902 the following scheme of work is presented:

The two books in the Teachers' Reading Circle will be studied during the forenoon sessions throughout the seven institutes.

The afternoon sessions will be devoted to the study of Indiana Poets and Poetry, Indiana School Law, and Indiana School Problems.

Believing implicitly in the value of the Township Institute as an agency in the education of the teachers of the State, and in its power in the advancement of our educational system, we hope that every teacher in Indiana will enter into the spirit of the work with the determination to make the institute a success.

We sincerely hope that your work for the year may be pleasant and profitable. Very truly,

FRANK L. JONES,
State Superintendent of Public Instruction.

June 1, 1901.

LAWS CONCERNING TOWNSHIP INSTITUTES, AND TEACHERS' WAGES.

192. School Law. Township Institutes. At least one Saturday in each month during which the public schools may be in progress shall be devoted to township institutes, or model schools for the improvement of teachers; and two Saturdays may be appropriated, at the discretion of the Township Trustee of any township. Such institute shall be presided over by a teacher, or other person, designated by the Trustee of the township. The Township Trustee shall specify, in a written contract with each teacher, that such teacher shall attend the full session of each institute contemplated herein, or forfeit one day's wages for every day's absence therefrom, unless such absence shall be occasioned by sickness, or such other reason as may be approved by the Township Trustee, and for each day's attendance at such institute each teacher shall receive the same

wages as for one day's teaching: Provided, That no teacher shall receive such wages unless he or she shall attend the full session of such institute and perform the duty or duties assigned.

Teachers' Wage Law: The daily wages of teachers for teaching in the public schools and attending county and township institutes sha'l n.t be less than an amount determined by multiplying two and one-half cents by the general average of scholarship and success given the teacher on his highest grade of license at the time of contracting: Provided, That only the general average of scholarship shall be used in determining the wages of beginning teachers.

FIRST INSTITUTE. (PRELIMINARY.)

(To be held before the opening of the schools.)

PROGRAM.

9:00. (1). Opening Exercises.
(2). Roll call and organization.
(3). The Nineteenth Century.
(a). Paper.
(b). Discussion.
(c). Quiz.

11:00. (1). New School Laws (See School Law of Indiana);* also see Educator-Journal for April, 1901, pp. 437-440.
(a). Teachers' Wage Law.
(b). Compulsory Education Law.
(c). Transfer Law.

Note.—Assign the above to three teachers and have full discussion.

12:00. NOON.

1:30. Indiana Poets and Poetry (Book on Young People's R. C. List).

2:30. The Revised School Books.
(a). Consider fully the Revised Spelling Book. See how the course of study in spelling is changed.
(b). The Revised Grammar. Note carefully the changes by comparing with the old series.

3:30. Assignments of work for the Second Institute.

EUROPE IN THE NINETEENTH CENTURY.

(In this first institute—

1. Assign to certain teachers the biographical sketches as indicated in "4" of the outlines for the second institute, and in "2a" of the outlines for the seventh institute, in order that there may be ample time to collect the material and to set it forth in appropriate form.

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*Note.—During the year the teachers will be asked to refer to the School Laws and the Biennial Report of the Superintendent of Public Instruction. The County Superintendent will supply each Institute with a copy of each volume, which can be transferred from one teacher to another during the year. Teachers should not write to the State Superintendent for copies of these inasmuch as they are always distributed through the County Superintendents.

2. Prepare, as the work progresses, from month to month, a list of artistic subjects such as poems, pictures, etc., relating to the historical development.

3. Begin the collection of material for the answer to "6" in the outlines for the seventh institute.)

I. Study Carefully Pages 9 to 69.

1. The practical and the sentimental considerations underlying political action. (Pp. 9-10.)
2. The nature and purpose of the three revolutions. (Pp. 14-15.)
3. The French Revolution. (Pp. 31-69.)
   a. What transactions in North America had made France more fully acquainted with the aspirations, principles and institutions of the new Republic?
   b. Enumerate the various elements in the condition of Europe tending to incite revolution in France. (Pp. 17-30.)
   c. Arrange in order the principal transactions of the years 1789-1815.
      (1.) What was the movement in the history of the United States during these years?
      (2.) Set forth both the temporary and permanent results of the French Revolution.

Note.—In addition to the paper and discussions upon the pages assigned, there should be appointed each month a teacher to direct a quiz. He should prepare a list of questions covering the month's assignment, and have them fully answered by the various teachers.

POETS AND POETRY OF INDIANA.

Note.—The outlines are based upon Indiana Poets and Poetry, a book on the Reading Circle list for the Eighth and Higher Grades.

General.—A book like this, while of the utmost value to the teachers of the State, is an especially difficult one to outline for discussion. It has seemed best therefore simply to suggest a number of problems the discussion of which may be profitable. A free interchange of opinion carefully directed by a competent leader is the thing to be desired in studying and judging a piece of literature. A suggestion for a paper is also added to each outline, is suggested that every group of poems should first be examined by the light of some such tests as these, which are given here and referred to under each separate outline: (a) Note which poems seem to be marked by attractive melody, (b) which seem to be spontaneous, (c) which ones seem particularly labored, (d) which are marked by delicacy of thought, (e) which by sublimity of thought, (f) which are especially imaginative, (g) which contain fine figures of thought, (h) which are based upon or contain appropriate mythological or other allusions, (i) which one your literary judgment tells you is the best, (j) which one you like best without reference to its ability. During the year make a chronological list of the poems and see if the history and progress of Indiana is reflected thereby.

1. The value of such a collection of poetry.
2. Why would the contents of such a volume necessarily be of uneven value? Would it be possible to have each author represented in proportion to the relative worth of his work?
3. Are the headings adapted by the Editors for grouping the poems mutually exclusive? Might a poem of "home" be a poem of "sentiment" also, and in addition a "dialect" poem? What is the value then of such a plan? Would there have been any advantage in arranging the selections chronologically?
4. Read the Poems of Patriotism. (See general suggestions.)
5. Explain the general conception and sentiment in each of this group:
   a. Decoration Day on the Place.
   b. At Lincoln's Grave.
   c. The High Tide at Gettysburg.
   d. The Old Sergeant.
6. Paper: The Hoosier Type and Dialect.

SECOND INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
(1.) The Nineteenth Century.
(a). Paper.
(b). Discussion.
(c). Quiz.
10:30. (2). Sanitation and Decoration.
(a). Paper.
(b). Discussion.
(c). Quiz.
12:00. NOON.
1:30. (3). Poets and Poetry of Indiana.
2:30. (4). Indiana's School Funds. (School Law.)
3:30. (5). Assignment of work for Third Institute.

1. EUROPE IN THE NINETEENTH CENTURY.

I. Give a Careful Reading to Pages 72-134.
1. Observe that the movement was both reactionary and revolutionary. Define the use of each of these terms as used in history.
   a. To obtain the spirit and aim of the reactionary effort study the full implication in the statement of the Emperor to the professors of the University of Pavia. (Page 124.)
   b. To gain a greater knowledge of the same spirit and aim, note carefully the transactions of the Congress of Vienna. (Pp. 72-79.) Each teacher should master in detail the work of the Congress of Vienna.

c. Notice that all references to Count Metternich reflect the reactionary spirit and aim. (Pp. 80-89, 101, 104, 110, 117, 124, 126, 130.)

2. What were the principal transactions in the development of social and governmental life in the United States from 1815-1848?
   a. Name the things indicating that constitutional government in the United States was influencing Europe. (Pp. 85 and 96.)
3. Note the various passages showing that the revolutionary movement aimed to bring about removal of impositions upon the peasantry, national autonomy and constitutional government.
4. To realize more fully the spirit of the revolution prepare brief sketches of the lives of Kossuth, Mazzini, Manin and Garibaldi.
5. In what respects did the movement from 1815 to 1848 strengthen—
   a. The reactionary cause?
   b. The revolutionary cause?
6. Make a list of the noted men and women named in these pages.

2. SANITATION AND DECORATION.

Introduction and Chapters I and II.

1. Purpose of the book as stated by its authors.
   a. Is the purpose a good one?
   b. Do teachers need to study the problems of sanitation and decoration?
   c. In what condition are school houses in your township?
   d. How many schoolrooms in your township are decorated?
   e. What are the views of your township trustee and the citizens in regard to good school buildings and artistic interior finish?
   f. Has the chief growth in the building of school houses in your community been in more stone trimmings, and higher belfrys rather than an improvement in their sanitary and interior decorative features? Why?
   g. This book will create a desire and demand for good buildings, tasty decorations and needed sanitary appliances.
2. Do modern educational methods tend to make work as easy as possible? Illustrate.
   a. Why do we often hear it said that the old schools were the best? Were they?
   b. In what way will a sanitary building administer to the child's growth and development?
3. Location of schools.
   a. What points should be considered in the location of a school house?
   b. Location of the country school.
      (1) Soil.
      (2) Slope.
      (3) Water supply.
   c. Location of city school.

4. Construction of school houses.
   a. Why has not the architectural development of the school house been so rapid as that of the other parts of our school system?
   b. Brief history of the development of school buildings.
   c. Sanitary laws.
   d. The financial problem.
      (1) Cost of the buildings in your township.
      (2) Could a sanitary building be erected for the same amounts as above?
   e. Construction requirements.
      (1) Substantial.
      (2) Materials.
      (3) Floors.
      (4) Basement.
      (5) Interior walls.
      (6) Finish.
      (7) Windows (careful study of this).
   f. Protection from fire.
   g. Exterior design.
   h. Interior design. (See cuts.)
   i. Plans for houses of one and two rooms. (See Biennial Report also.)

3. INDIANA POETS AND POETRY.

1. Read "The Poems of Childhood." (See general suggestions.)
2. Note that some of these are about childhood, that some are expressions of childhood, and that some are supposed to be addressed to children.
3. What are the characteristics of a good lullaby? Which of these lullabies do you prefer: "Baby's Boat Song," "Sleep, Little Sweetheart," or "A Lullaby"? Justify your choice. Is there any other lullaby equal to these in the group?
4. How does "The Tales of the Sandman" differ in spirit from those mentioned?
5. What to your mind accounts for the great popularity of "Little Brown Hands"?
6. Note the different attitudes toward life in the three poems in this group by Mr. Riley.
7. Paper—James Whitcomb Riley.

ventilating

4. SCHOOL FUNDS.

(Common School. Congressional, Dog Tax, Liquor Licens
   a. History of Fund. Biennial Report, 1900, p. 295. Illustrate.
   b. Surplus Revenue Fund. Biennial Report, 19 ventilation.
   c. Bank Tax Fund. Biennial Report, 1900, p
   d. Solvent Fund. Biennial Report, 1900, p s fully.
   e. Other Funds. Biennial Report, 1900, iscuss fully.
   f. See also the "School Law of Indian fully the diagrams on pages 44, See index to Law for page ref rams in Biennial Report.

g. Discuss the subject of school taxation.
   (1) State Tax for Tuition.
   (2) State Distribution of Interest on Permanent Funds.
   (3) Local Tax for Tuition.
   (4) Special School Tax.
   (5) Poll tax.
   (6) Tax in special cases and for payment of bonds.

h. What are all of the sources of funds used in the payment of teachers?

i. Study the statistical tables in regard to the funds as given on pages 301-315 of Biennial Report, 1900.

THIRD INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
   (1). Nineteenth Century.
      (a). Paper.
      (b). Discussion.
      (c). Quiz.

10:30. (2). Sanitation and Decoration.
      (a). Paper.
      (b). Discussion.
      (c). Quiz.

12:00. NOON.

1:30. (3). Poets and Poetry of Indiana.
      (a). Paper.
      (b). Discussion.

2:30. (4). Statistical Studies.
      (a). A Comparative Study, pp. 427-432 Biennial Report.
      (b). Compulsory Education Statistics, pp. 490 519 Biennial Report.

:30. (5). Assignment of work for Fourth Institute.

1. EUROPE IN THE NINETEENTH CENTURY.

b. In Carefully the Entire Discussion, Pages 135-200.
gr lent of these pages should give especial attention to the

3. Location of g as he reads:
   a. What p anges occur between 1848 and 1898.
   house?
   b. Location of t te to Germany, Italy, Austria and France.
      (1) Soil. are brought about under the jurisdiction of the
      (2) Slope. rnments.
      (3) Water supply. mplished are practically those aimed at by
   c. Location of city schoo 18.

2. Trace, in order, the reforms brought about in Germany (pp. 146-156); in Italy (pp. 157-166); in Austria (pp. 167-175); in France (pp. 137-144 and 176-187).
   a. Note particularly the changes as to suffrage, the legislative department, the executive and the centralization of power.
3. Enumerate the important changes occurring in the United States from 1848 to 1898.
   a. Compare these four countries with the United States as to local Self-Government; Freedom of Speech, and Press; Relation of Church and State, Military Service, and Responsible Ministry.
4. The nature of the German Government. (Pp. 190-198.)
   a. Its advantages and disadvantages.
   b. The purpose of "The Triple Alliance."
5. Make a list of the noted men and women mentioned on pages 135-200. Why was each famous?

2. SANITATION AND DECORATION.

Chapter III and Biennial Report, 1900 (pp. 592-593) also (607-612).

1. How is air vitiated?
   a. Undesirable elements in air once breathed.
   b. Effects of these elements on human life.
   c. How may you detect these elements in the air?
   d. Tests for bad air. (Perform some of these experiments before the institute.)
      (1)
      (2)
      (3)
      (4) Pettenkofer's method and results. Explain table, p. 38.
2. Ventilation requirements.
   a. For the individual.
   b. For a school of thirty pupils.
   c. How large should a room be for the accommodation of thirty pupils? How often should the air be changed in such room?
   d. Rules respecting ventilation, p. 40.
      (1)
      (2)
      (3)
      (4)
      (5) Are the above practicable? See plan for ventilating school rooms in Biennial Report.
3. Natural ventilation.
   a. Diffusion. Illustrate.
   b. Differences in temperature, causing currents. Illustrate.
   c. Distinguish between natural and artificial ventilation.
4. Artificial ventilation.
   a. Gravity system. Illustrate. Discuss fully.
   b. Mechanical power. Illustrate. Discuss fully.
   c. Draw on the board and explain fully the diagrams on pages 44, 45, 46, 47, 51. See also diagrams in Biennial Report.

5. Lighting of school rooms.
   a. Problems that arise, pp. 54-55.
   b. Prof. Forster's point, p. 55.
   c. Relation of window area to floor area.
   d. Location of window. See figures in Biennial Report also.
   e. Direction of the light.
   f. Requirements in London, p. 58.
   g. Requirements in Germany, p. 58.

3. POETS AND POETRY OF INDIANA.

1. Read the Poems of Home and the Poems of Sentiment. (See general suggestions under Outline I.)
2. Notice the difference in delicacy of atmosphere in The Hoosier's Nest, and When She Came Home. Show the essential difference in the subjects of these poems.
3. Study Isabel Lee. Note its ballad swing, suggesting Lochinvar, and its subject—the triumph of death among Isabel's wooers.
4. Comment upon the nature of the sentiment and the manner of its expression in the following poems. Of what value are poems of this class? Would you recommend them in large numbers for children to read?
   a. Moonlight on the Lake.
   b. Chanson.
   c. Jimmy's Wooing.
   d. Vivérals.
   e. A Toast to Brown Eyes.

   Which of these do you assign the first place? Why?
5. Paper—New Harmony as a Social and Literary Force.

FOURTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
   (1) Nineteenth Century.
      (a) Paper.
      (b) Discussion.
      (c) Quiz.
10:30. (2) Sanitation and Decoration.
      (a) Paper.
      (b) Discussion.
      (c) Quiz.
12:00. NOON.
1:30. (3) Poets and Poetry of Indiana.
2:30. (4) The Rural Schools.
3:30. (5) Assignment of work for Fifth Institute.

EUROPE IN THE NINETEENTH CENTURY.

I. As a Preliminary Study, Examine the Whole Discussion, Pages 201-238.
   1. The development portrayed is constitutional and peaceful.
      a. Give examples, and contrast with the development on the continent of Europe.
   2. The progress relates mainly to the following:
      a. The reform of Parliament; including changes concerning contested elections, and the reform of the ballot. (Pp. 204-222.)
      b. The reform of local government in cities, towns and counties. (Pp. 222-224.)
      c. The reform of the protective system. (Pp. 224-225.)
      d. The reform of the civil service. (P. 226.)
      e. The reform of the government of Ireland. (Pp. 228-238.) This includes:
         (1) Catholic Emancipation. (P. 230.)
         (2) The Disestablishment of the English Church in Ireland. (Pp. 230-232.)
         (3) The Land Question. (Pp. 232-235.)
         (4) Home Rule. (Pp. 234-237.)
   3. Compare the government of the United States with that of England as to all the features indicated under "2".
      a. In what respects is the English government superior?
      b. In what respects is the government of the United States superior?
   4. Famous men and women of this period.

2. SANITATION AND DECORATION.

Chapters IV, V, VI.
   1. Sanitary problems.
      a. The care of the school building.
      b. Cleaning of school house. How? How often? By whom?
      c. How do you account for the increase in the diseases of children just after school opens?
      d. School room dust. Its composition.
      e. Water supply.
      f. Common use of pencils and its promotion of disease.
      g. Oiling the floors. Why?
      h. Sanitary inspection.
         (1) What has been done?
         (2) What should be done?
   2. School furniture.
      a. Some prominent defects in school desks and seats.
      b. Eulenberg's statement, p. 74.
      c. Effects of defective desks and seats.
      d. Adaptability of desks.
         (1) Distance, p. 75.

(2) Difference, p. 75.
(3) Slope, p. 75.
(4) Lubreich's rule, p. 76.
(5) Adjustable desks. Describe.

3. Blackboards.
   a. Its position in the room as regards the direction of the light.
   b. Material of boards.
4. Floors.
5. Drinking fountains and cups. (Discuss fully.)
   a. Individual cups.
6. The school room.
   a. Its character. A workshop. A study. A living room.
   b. Beauty and harmony.
   c. The finish.
      (1) Merits of various timbers.
   d. Walls and ceiling.
      (1) Walls should not be left rough. Why?
      (2) Walls should not be left white. Why?
      (3) Coloring.
      (4) Paint vs. paper.
      (5) Relation of color to wood work.
7. Window shades.
8. Other permanent furnishings.

3. POETS AND POETRY OF INDIANA.

1. Read Poems of Nature. (See general suggestions under Outline I.)
2. Select a group of these nature poems that in your judgment would appeal to a child, and another that would be understood only by an adult. Try to formulate the characteristics on which you base your divisions.
3. Study Mont Blanc. Enumerate all the spiritual suggestions which the mountain has for the poet. How would you characterize the mood inspired? Is the language in keeping with this mood?
4. Contrast The Sweet South Wind with Mont Blanc in regard to sentiment and style. Contrast both these with The March Frosts.
5. Paper—Maurice Thompson.

4. THE RURAL SCHOOLS.

1. The Problem. Biennial Report 1900, pp. 520-525.
2. The Solution. Biennial Report, 525 and following.
3. Consolidation and Transportation.
   a. Arguments in Favor of. See pp. 526-528.
4. What Indiana is Doing in Matters of Consolidation. Pp. 529-557 Biennial Report. (Discuss fully the cost of transporting, distances, etc., in the various counties.)

FIFTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
(1) Nineteenth Century.
(a) Paper.
(b) Discussion.
(c) Quiz.
10:30. (2) Sanitation and Decoration.
(a) Paper.
(b) Discussion.
(c) Quiz.
12:00. NOON.
1:30. (3) Poets and Poetry of Indiana.
2:30. (4) The Rural School Problem (continued).
3:30. (5) Assignment of work for Sixth Institute.

1. EUROPE IN THE NINETEENTH CENTURY.

I. Attempt First to Gain a General Thought of the Whole Subject. (Pp. 239-282.)
1. The respects in which Eastern Europe and Western Europe differ. (P. 239.)
2. What three problems does "The Eastern Question" include?
3. Russia.
a. The vast extent of the empire and the "motley collection of Oriental races." (P. 240.)
b. Give careful attention to Religion (pp. 241-244); to Government (pp. 244-245); to the position of the Government toward Temperance (pp. 245, 249); to the condition of the peasants.
c. Enumerate the various attempts at reform. What disturbances have occurred since 1894?
d. Compare the present condition of the four points mentioned under "b" with the condition of the same in the United States.
4. The Empire of the Turks.
a. The severe arraignment by the author. (Pp. 251-252.)
b. The evidences of bad government.
c. The subject-peoples of the Empire and their condition before the invasion of the Turks. (Pp. 254-257.)
d. The gradual reduction of the limits of the Empire. (Pp. 259-281.)
(1) In studying this reduction give special attention to the efforts of the Slav subjects to win their freedom (pp. 263-265); to the reasons for Russia's enmity toward the Turks (p. 265); to the "interests" of the different

nations; to the treaties of San Stefano and Berlin; to the condition of the small Slav states and Greece (pp. 276-280).

e. The possible solutions of the Eastern Question.

5. Famous men and women of this period.

2. SANITATION AND DECORATION.

Chapters VII and VIII.

1. Schoolroom Decoration.
   a. Beauty does not depend upon complexity. Explain fully.
   b. Multiplcity of ornaments a characteristic of savagery.
   c. In the pictures of well decorated schoolrooms, plates 20 and 14 and Biennial Report, pages 670, 671, 672 and following, see how few are the decorative pieces.
   d. See plate 21. An over-decorated room.
   e. Study the plates as suggested on page 95.
   f. How should we decorate? See pages 96-97, and following.
   g. Where may decorative materials be had?
   h. Cheap chromos and advertisements not wanted.
2. Pictures.
   a. Do all good pictures decorate?
   b. How about historical pictures?
   c. Kinds of pictures.
      (1)
      (2)
      (3)
      (4)
   d. Subjects for the various grades (see pages 100, 101, 102, 103, 104).
   e. Framing.
   f. Hanging.
   g. Teachers should urge school officers to provide good walls and ceilings before pictures are procured.
   h. Study carefully the photogravures in the book—Sanitation and Decoration.
   i. Casts.
      (1) Qualities.
      (2) Costs in the round.
      (3) See plates 22 and 23. Study carefully.
      (4) In relief.
      (5) Subjects, pp. 112, 113, 114.
3. Other decorative objects.
   a. Vases. See p. 115.
   b. Tiles. (See rules, p. 118.)
   c. Flowers.
4. The old country schoolroom.
   a. What things should be removed?
   b. How about maps, globes, etc.?
   c. A scrubbing party.
   d. A suggestion as to windows. Pp. 123, 124.

e. The teacher's desk.
f. Decoration easy to be obtained.

Note.—Let each teacher make an honest effort during the year to improve the appearance of his schoolroom.

3. POETS AND POETRY OF INDIANA.

1. Read songs and sonnets. (See suggestions under Outline I.)
2. What are the distinguishing marks of a sonnet? Examine the sonnets in this group to see which actually stand the tests.
3. Why, as a rule, are sonnets less interesting to the average reader than poems like, say, Midnight Song of the Mocking Bird?
4. Are there any other sonnets in this group as good as, or better than, Mr. Riley's Pan?
5. Of the poems other than sonnets in this group which do you think would lend themselves most readily to musical settings? Are these the ones with most thought in them?
6. Paper—Lew Wallace.

4. THE RURAL SCHOOL PROBLEM—Continued.

1. What other States are doing in matters of transportation and consolidation. Biennial Report, 1900, pp. 558-577.
2. Draw on board the diagram on page 579 of report and explain fully in connection with the written article, pp. 577-581.
3. The Enrichment of Rural School Life. Biennial Report, pp. 588-592.
   a. Discuss the plan fully.
   b. Place on the board the diagram on page 589.
   c. Could this plan be worked in your township?

SIXTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
(1) Nineteenth Century.
(a) Paper.
(b) Discussion.
(c) Quiz.
10:30. (2) Sanitation and Decoration.
(a) Paper.
(b) Discussion.
(c) Quiz.
12:00. NOON.
1:30. (3) Poets and Poetry of Indiana.
2:30. (4) A talk or paper on one of the following subjects:
(a) How can we establish libraries in our schools? (See School Law.)
(b) What should be the relation of the school to the home?
(c) What should school registers contain?
3:30. (5) Assignments of work for Seventh Institute.

1. EUROPE IN THE NINETEENTH CENTURY.

I. Seek the General Thought of Part VII by a Close Study of Page 283; by a Careful Reading of Pages 284-304.
   1. Name the eleven Minor Powers and locate Andorra, San Marino and Luxemburg.
   2. Give the races, the religion and the present form of government of each.
   3. Switzerland.
      a. Trace the development of government from 1291 to 1874.
      b. Compare the constitution with that of the United States.
         (1) What is your estimate of the provision as to the executive and the referendum?
            (a) Has there been an effort to introduce the referendum in any one of the United States? Does it exist in any one of them?
   4. Holland and Belgium.
      a. The account on pages 287-290 emphasizes what changes in the development of Holland?
      b. What are the chief events in the progress of Belgium?
      c. Compare the constitution and the education of the two countries.
      d. Why was the union ill-assorted?
      e. The condition of suffrage in 1893 in Belgium? The present condition? What is your estimate of this plan?
   5. Spain and Portugal as compared with Denmark, Norway and Sweden.
      a. The difference in geography, races, religion and educational systems.
      b. Why is the union of Norway and Sweden ill-assorted, while that of Spain and Portugal would be advantageous?
      c. Give the development of constitutional liberty in each of the five countries.
      d. Point out Russia's interest in Norway.

2. SANITATION AND DECORATION.

Chapters IX and X.
1. School Children.
   a. Function of education as stated on page 127.
   b. The moral, mental and physical sides. Do we emphasize one more than another? Which? Why?
   c. We should early determine what are the defects of the children under our charge. How?
   d. Will children look after their own health?
2. Deformities and diseases.
   a. Spinal curvature. Cure, 1, 2, 3, 4.
   b. St. Vitus dance.

c. Hysteria.
d. Defects of hearing.
e. Contageous diseases.
(1) Public schools spread these. Why? How?
(2) Diphtheria.
(3) Smallpox.
(4) Scarlet fever.
(5) Measles.
(6) Whooping cough.
(7) Mumps.
(8) Tuberculosis.
(9) Reception and infection. P. 137.
(10) Disinfection of schools. How? Ask your county health board.
(11) What are the rules of the State and county health boards? Ask your secretary of the county board.
(12) Inspection of children in Boston. Pp. 140-141.
(13) Inspection of children in New York. P. 141.
(14) Philadelphia, St. Louis, Chicago.
(15) Statement by W. B. Powell. P. 145.

3. The eye.
a. Its structure.
b. Tests of vision.
c. Long sight.
d. Near sight.
e. Effect of poorly-printed books and unsanitary houses.
f. Do your pupils use poorly printed books?
g. Do you permit the direct light to shine in the eyes of pupils?
h. How can you better protect the eyes of pupils?

3. POETS AND POETRY OF INDIANA.

1. Read poems in dialect. (See general suggestions under Outline I.)
2. What different varieties of dialect are found in this group? On what ground is a poem like "Owed to Turkey" included?
3. Does dialect in any way put a limitation upon a piece of literature? That is, does the fact that a poem or story is in the Hoosier, or Yankee, or negro dialect hinder its chances of long life? Can you name any poems of first rank in dialect? (Burns', or Lowell's Biglow Papers?)
4. Notice that the dialect must seem to be the natural expression of the character supposed to be speaking, and that this fact introduces a pronounced dramatic element. Describe the character speaking in each poem. Which one is most clearly defined? Which one is most vaguely marked? Arrange the group on this basis.
5. Do any of this group have pathos as an element?
6. Paper—Edward Eggleston.

SEVENTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll Call.
(1). Nineteenth Century.
(a) Paper.
(b) Discussion.
(c) Quiz.
10:30. (2) Sanitation and Decoration.
(a) Paper.
(b) Discussion.
(c) Quiz.
12:00. NOON.
1:30. (3) Poets and Poetry of Indiana.
2:30. (4) Discuss any or all of the following questions:
(a) Do we graduate our pupils from the eighth grade too young?
(b) Shall we encourage all common school graduates to go to high school?
(c) What should be the minimum qualifications of teachers to teach in the common schools?
(d) What is the aim of Twentieth Century Education?
4:00. Adjournment.

1. EUROPE IN THE NINETEENTH CENTURY.

I. Endeavor to Gain a Knowledge of the General Nature of "Part VII" by a Close Examination of the Preliminary Statement on Page 305, and an Attentive Reading of Pages 307 to 333, Inclusive.
1. Give a careful analysis to the thought presented on page 305.
2. Under "The Progress of the World," pages 307-323.
a. Prepare brief biographies of each of the persons prominently concerned in the progress—as of Arkwright; of Eli Whitney; of James Nasmyth, etc.
b. Explain, in order, the different steps under the development of cotton, iron, coal, steam machinery, transportation, telegraph and canals.
c. Give illustrations of the interdependence of the different lines of development mentioned under "b".
3. Under "Questions of the Day"—
a. Notice especially, that the two dangerous points are Alsace-Lorraine and Constantinople. (Locate these, and think out their strategic importance.)
b. Examine the military situations and the condition of international disputes, pages 324-327.

c. What distinction does the author make under "Socialism"? (Pp. 327-329.)

(1) Consider, in connection with "The Nihilists," the disturbances occurring in Russia since the beginning of 1901. (On page 250 the author says, "The nineteenth century has not yet dawned in Russia." It will be remembered that the great fact of the nineteenth century is the development of constitutional government. Do these disturbances indicate that at the beginning of the twentieth century Russia is entering upon the work of the nineteenth—the work of developing a constitutional government?)

4. The other "Questions of the Day" considered by the author are—"Universal Suffrage," "Hereditary Legislatures," "Land Tenures," "National Autonomy," "Religion and Education in Relation to the Church."
   a. How would you arrange these questions in the order of their importance?
   b. Is the present tendency in the United States to enlarge or to restrict the suffrage? Why?
5. Re-examine the author's discussion on pages 9 to 15.
   a. Does your study during the seven institutes show that the two dominant ideas have been democracy and nationality?
   b. Can these two formative ideas be reduced to one—democracy?
6. What is the gain to you, as teachers, resulting from the study of the nineteenth century in Europe? Work out with especial care the answer to this question.

2. SANITATION AND DECORATION.

Chapters XI and XII.

1. School Authorities and Patrons.
   a. Some of the duties of authorities.
      (1) Provide good buildings.
      (2) Supply ample fuel, good water, sufficient apparatus, keep building clean.
      (3) The public's responsibility.
   b. The teachers' responsibility.
      (1) Instruction in sanitary matters.
      (2) Michigan laws.
   c. Relation of parents to the school.
2. Beauty in school work.
   a. Supplementary to beauty in schoolroom.
   b. Beautiful environment not all.
   c. Beauty of room reflected in beautiful work.
   d. Adaptation.
   e. Arrangement.
   f. Enrichment.

g. Examples. See plates 37 and following. Try to encourage this kind of work in your schools.
h. Relation of good decorations to daily work.
i. Results in nature study.
j. Results in History, Geography, Literature, Picture Study.
k. Each teacher should take to the last institute some examples of meritorious work done in his school illustrative of the points of this chapter.

3. INDIANA POETS AND POETRY.

1. Read Miscellaneous Poems. (See general suggestions under Outline I.)
2. Point out the different phases of life and religion as they are expressed in each poem of the following group and discuss the validity and significance of each view:
   (1) Two Views.
   (2) Paddle Your Own Canoe.
   (3) The Immortality of the Soul.
   (4) Unawares.
   (5) My Secret.
   (6) Better Late than Never.
   (7) The Interpreter.
   (8) Religion and Doctrine.
   (9) Form Worship.
   (10) A Cynic.
   (11) Men Told Me, Lord.
   (12) Hail and Farewell.
   (13) The Crowning.
   (14) The Magic Pitcher.
3. Paper—Two Indiana Successes: When Knighthood Was in Flower and The Gentleman from Indiana.

3. Arbor and Bird Day Program.

OCTOBER 25, 1901.

Note.—Inasmuch as the materials for Arbor and Bird Day programs are not easily obtained, many of the selections and suggestions used heretofore are reproduced in the following program:

ARBOR DAY.

To the Pupils in the Public Schools of Indiana:

The observance of Arbor Day in the schools of the country is partly the result of a conviction that in the education of children something more than a knowledge of the text-books is necessary. Nature is a wonderful worker, and no one can watch her and learn of her ways without realizing that she has much to teach that can not be found in books. The time was when it was thought that all education came through the study of books, but now it is almost universally recognized that one may know a great deal of books and yet have missed some of the best things in education. Too many people go through the monotony of their daily occupations without seeing the beauty that not only brings cheer but gives wisdom. Such persons do not know how to aid nature in keeping the world beautiful, but often retard her by doing injury to trees, plants and shrubs. They are unconscious of the power that lies in a lovely flower, a stately tree, or a graceful vine, to influence life and mold character.

Arbor Day has come again to remind us that we can do much to make the scenes about us more attractive. If we all make an effort to place trees, shrubs and plants into the school grounds, it will be only a few years until some of the yards which are now desolate will be transformed into places which all will admire. When we have done our part, and the branches of the trees begin to spread themselves, even a very little, the birds will come, and when they are sure that they can stay with safety, nests will

be built. In at least one school yard in the United States squirrels play on the same ground with the children with no fear of harm. It is hoped that you will take an interest in the planting of trees, and that you will then try to encourage the birds to build their nests near the school house. This leads us to the discussion of the

BIRD DAY.

feature of the program. Year by year it has been observed that our native birds are growing fewer. The well-known birds about our homes, our farms and our school houses are disappearing. We miss their movements and their songs. They live largely upon insects, and, as the birds become less numerous, the insects increase and prey to a greater extent upon grains, plants and fruits. Birds are the greatest friends of the farmer and fruit grower. They are a source of pleasure and give an added interest in life to all who in any degree look upon the things about them.

THE AUDUBON SOCIETY.

For the purpose of protecting our native birds, there has been organized a society called the Audubon Society. It is named in honor of John J. Audubon, the first great student of American birds. Organizations have been effected in many States. Both old and young are taking part in this desirable work. In Indiana a State Society has been formed; local societies are being organized, and there is provision for young people either to organize junior societies or to become members of the State Society. Young folks can do much, both in school and out, to discourage cruelty and the wanton destruction of birds and their nests and eggs. They readily take to nature study, and birds form one of its most attractive subjects. Their coming and going, changes of plumage, mating, nesting and feeding habits and attractive songs make them fascinating to those who, by a little encouragement, are so directed that they come to know them.

There have been found in Indiana about 320 different kinds of birds. Some of them have disappeared. Of others, but few are left as a reminder of their former numbers. All kinds are decreasing in numbers. The causes of this may be easily learned, and each can do something to protect the birds we have and to prevent the destruction of their homes and their eggs.

In many schools, as the pupils come to know the birds about them, they have become ardent champions of the little songsters. The cruel boy who would pelt them with stones or rob their nests has been compelled to desist. At no place, perhaps, have the birds more ardent friends or are their nests more carefully guarded than at the Reform School for Boys at Plainfield. There are over 600 boys sent there to be made better who have made friends with the birds and insist they shall be thoroughly protected.

The effects of the work of this great Audubon Society may be seen in the lessening of the numbers of birds and feathers that are worn upon women's hats. To obtain these articles of decoration it is necessary to kill great numbers of birds. Many of these were killed and their young left to starve. Birds have been slaughtered in our own State for this purpose. As women are coming to understand that the wearing of birds and feathers means the inhuman slaughter of innocent lives, their feelings are turned against such decorations; they are using instead the feathers of domestic fowls and of ostriches, thus avoiding such cruelty. The efforts of young people will do much to stop the killing of beneficial birds and to prevent that fashion's reappearing.

Many teachers are interesting their pupils in birds. They soon learn to distinguish a number of the common kinds about them; to describe their appearance, to tell of their haunts, to know their songs, their foods, their bird companions and many other things that are not told in books; they are led to acquire original knowledge; they are discoverers in what is to them and to most persons around them an unknown field; they learn to use their eyes and ears, to remember what they have learned, and should be encouraged to tell it properly.

It is desired that teachers and pupils co-operate in this commendable work of bird protection. In all such efforts good is being done, not only for the present, but for the future.

That the Arbor and Bird Day program may greatly add to your love of trees and birds is the sincere wish of your friend,

FRANK L. JONES,
State Superintendent of Public Instruction.

The Governor has proclaimed Friday, October 25, 1901, as Arbor and Bird Day. His proclamation will appear in the newspapers and should be read to the pupils.

SUGGESTIVE PROGRAM.

1. Song.
2. Address by teacher or patron.
3. Reading of the Governor's Proclamation.
4. Song.
5. Reading of Superintendent's letter.
6. Recitation or reading.
7. Recitation or reading.
8. Dialogue.
9. Song.
10. Recitation or reading.
11. Recitation or reading.
12. Dialogue.
13. Hear the reading of the lists of native trees and birds prepared during the fall by each pupil. Make a complete list.
14. Reading—"The Pledge." Secure signatures.
15. Planting of trees and shrubs.
16. Song.

Note.—It is suggested that in the opening address attention be called to the object of Arbor and Bird Day.

The recitations should be equally divided between subjects bearing on Trees and Birds. A few poems and selections follow; they are suggestive only.

SUGGESTIONS FOR ARBOR DAY.

By Richard C. Barrett, Iowa.

Compositions may be prepared by older pupils upon various subjects appropriate for Arbor Day. The following are suggested:

How trees help the birds.
Famous trees in history.
Our duties to posterity.
How trees influence climate.
A short history of Arbor Day.
General usefulness of trees.
Nut-bearing trees.
The birds I know.
Why birds should receive our protection.

The teacher should inculcate in his pupils a desire to know more of the subject of tree, shrub and flower culture and thus impart practical information and at the same time cultivate that fine aesthetic nature so much to be desired in all.

Do not make your program too long. Put into it all the life and enthusiasm of which you are capable. Some of the best lessons pupils receive are given incidentally.

In teaching the utility of trees, make the pupils appreciate their value in furnishing food, materials for clothing, ropes, medicine, oils, homes for birds, houses, furniture, etc.

Show their uses as defense against storms, from avalanches in Switzerland, and in preserving health by counteracting the influences of malaria; their influence in increasing rainfall, retaining moisture and modifying the temperature.

It is better to have a child enjoy what he knows, and love what he enjoys, than to serve up raw facts by the thousand.

Songs suitable for Arbor Day may be found in any song book. For the primary grades the following may be used:

"Little Maid Margery," "The Wren and the Hen," "Blossom-Time," "Little Birdie in the Tree," "The Blue Bird's Song," "Robin's Apology," "Little Pussy Willow," "Don't You See Me Coming, Coming?' 'Birdies' Ball."

For the higher grades:

"In Woods is Peace," "Come to the Old Oak Tree," "All Things Bright and Beautiful," "Swinging 'Neath the Old Apple Tree," "The Cuckoo," "May Day," etc.

THE HISTORY OF ARBOR DAY.

The first suggestion respecting the annual planting of trees by children is attributed to Hon. B. G. Northrop, secretary of the Connecticut Board of Education, who made the suggestion in his report in 1865. In 1857 he offered prizes to the children of Connecticut to stimulate Centennial tree planting.

The setting apart of an annual day for that purpose by the State authority originated with Hon. J. Sterling Morton, Secretary of Agriculture, who induced the then Governor of Nebraska to issue a proclamation appointing a day for the planting of trees throughout the State. In 1872 the day was made a legal holiday, in which provision was made for awarding premiums to those who set out the largest number of trees. It is calculated that more than 800,000,000 Arbor Day trees are now in a thriving condition in Nebraska alone. Minnesota's first Arbor Day was observed in 1876, when a million and a half trees were planted. Kansas followed Nebraska's example in 1878. Next comes Iowa and Illinois. Michigan passed an Arbor Day law in 1881 and Ohio in 1882. Since then Arbor Day has been recognized and encouraged by the civil authorities of more than forty of the States. The first Arbor Day in Indiana was held in April, 1884; but the day was not generally observed until October 30, 1896, since which time it has been held annually on the last Friday in October.—Selected.

SOME GOOD TREES FOR SCHOOL GROUNDS.

By J. P. Brown, Connersville.

Were I to counsel as a landscape gardener, how to arrange and plant a tree of considerable magnitude, my advice would be very different from what I shall here suggest for the limited area of a school lot.

The forbidding appearance of many school grounds has much to do with making children careless of their surroundings, and this habit does not cease with childhood or school days.

The love of flowers, admiration of trees and interest in forests should be inculcated not by a spasmodic effort on Arbor Day, with a sentimental effusion, meaningless and soon forgot, but by frequent reference to trees, with lessons as to their value and character.

Certainly Arbor Day should be observed and plenty of trees planted; yet upon every day they should be protected and their habits studied.

Ample play grounds are indispensable, and grounds should be designed with a special view to shade and recreation. Trees should be planted in straight lines thirty feet apart, and a protection with stakes or boxes should be provided. Children, during excited play, are liable to injure, maybe destroy them; the hot sun will blister the exposed trunks and borers secure a lodgment, unless some protection is given.

Flowers and shrubs should be placed in borders hard by the school house and near the fences where they will be less liable to injury.

There is no region in temperate zones more favored by nature than was the State of Indiana, with her wealth of forest vegetation, temperature, soil and rainfall combined, to promote the greatest variety of useful plants. More than 100 varieties of trees were indigenous to our State, while twice as many have been brought from other parts of the world and successfully cultivated, besides the thousands of shrubs and plants which abound from the Ohio to the Lakes, and it should be an easy matter to select a dozen trees suited to any location.

What are the requirements of a tree?

1. It should be useful for some demand of the manufacturer, as yellow poplar.

2. It may possess in a very high degree some special feature of usefulness, as the hickory—elastic, flexible and dense; oak, the symbol for strength; ash, combining strength with lightness; white pine, capable of being wrought with facility in carpentry; catalpa, having great durability; locust, having density, firmness, durability; linden, combining lightness with toughness, or walnut, the favorite of the early settler for making rails, and the manufacturer of today for magnificent furniture.

3. Americans demand immediate results, hence early maturity is an essential requisite. The swamp maples, poplars and catalpas are of quite rapid growth.

4. Freedom from disease and attack of insects. The gingko, hackberry, and sweet gum are remarkably free from both.

5. Ability to withstand drought. The two Russians, olive and mulberry, and the catalpa resist the effects of dry locations.

Adaptability. Suited to many soils, as the walnut, catalpa, gingko and maples.

7. Beauty of flowers. Magnolia, locust, tulip, catalpa, dogwood and many shrubs.

8. Density of shade. Elms, maples, chestnut abele, cypress, linden, oaks, sycamore, catalpa, magnolia, yellow poplar, beech, hackberry, larch, Norway spruce, white pine, sweet gum, ash, locust, birch and gingko are all good for shade.

9. Ornamental foliage. Evergreens, cypress, weeping birch, larch, gingko, koelreuteria, etc.

A posthole should never be utilized in tree planting. Make the holes broad rather than deep, and if the soil is not suitable, bring good earth to fill it. Obtain well-rooted trees, preferably nursery grown. A few stumpy roots may be sufficient to maintain life, but will not secure a vigorous, healthy growth, and while new roots are being formed the tree is starving, and borers soon take possession. These pests seldom injure a tree unless its vitality has been impaired by disease. A healthy, vigorous tree sends its roots far away from the trunk in every direction in search of food and moisture. The working fibrous roots are almost invariably sacrificed upon removal of the tree. Nursery-grown trees which have been transplanted, however, are supplied with these small roots in a compact mass. It is, therefore, better to buy well-rooted trees rather than dig those in the woods.

Every bud which puts forth in a newly transplanted tree, requires a large proportion of sap. If many are left to expand the drain upon the tree will be greater than the roots can supply, and a feeble growth will result. Hence it is best to cut back the top to correspond with the roots.

I recently recommended the following list for Arbor Day planting:

1. Scarlet Maple.
2. Gingko.
3. White Elm.
4. Larch.
5. Sweet Gum.
6. Catalpa.
7. Hackberry.
8. Silver Maple.
9. Yellow Poplar.
10. Sycamore.
11. Ash.
12. Scarlet Oak.
13. White Pine.
14. Russian Mulberry.
15. Linden.
16. Honey Locust.

The first thing in importance is shade; ornamentation follows naturally.

The gingko, from Japan, is one of our finest trees for shade, beauty of foliage, freedom from insects and disease, and seldom requires pruning.

The sweet gum can scarcely be surpassed, as it possesses almost every good and desirable quality.

The hackberry supplies a much-needed food for native birds, in addition to its superior quality as a shade tree, and is remarkably free from insects.

The scarlet maple forms a round head, requires less pruning than silver maple, its branches are less liable to injury in storms, while the autumn foliage is superb.

The larch has a foliage which is grand, the tree is healthy, grows quickly and naturally forms a handsome tree.

The yellow poplar, although not a poplar at all, but a liriodendron, or tulip tree, is one of our handsomest trees for shade and should by no means be overlooked.

Trees which would be considered magnificent specimens on a lawn would be out of place on school grounds, while those trimmed up as becomes necessary here and on streets would be undesirable about a mansion.

THE TREE.

Bjornstjerne Bjornson.

The Tree's early leaf buds were bursting their brown;
"Shall I take them away?" said the Frost, sweeping down.
"No, leave them alone
Till the blossoms have grown."
Prayed the Tree while he trembled from rootlet to crown.

The Tree bore his blossoms, and all the birds sung;
"Shall I take them away?" said the Wind, as he swung.
"No, leave them alone
Till the berries have grown."
Said the Tree, while his leaflets quivering hung.

The Tree bore his fruit in the midsummer glow;
Said the girl, "May I gather thy berries now?"
"Yes, all thou canst see:
Take them; all are for thee,"
Said the Tree while he bent down his laden boughs low.

ARBOR DAY ANTHEM.

Dr. S. F. Smith, author of America.

[*Tune—America.*]

Joy for the sturdy trees!
Fanned by each fragrant breeze.
Lovely they stand!
The song birds o'er them thrill,
They shade each trinkling rill,
They crown each swelling hill,
Lowly or grand.

Plant them by stream or way,
Plant where the children play
And toilers rest;
In every verdant vale,
On every sunny swale,
Whether to grow or fail,
God knoweth best.

Select the strong, the fair,
Plant them with earnest care—
No toil is vain.
Plant in a fitter place,
Where like a lovely face,
Set in some sweeter grace,
Change may prove gain.

God will His blessing send—
All things on Him depend.
His loving care
Clings to each leaf and flower
Like ivy to its tower,
His presence and His power
Are everywhere.

NOTES ON TREES.

(By permission of the State Superintendent of Wisconsin.)

HOW TREES EAT.

The materials upon which a tree feeds are derived from the soil and the air. The minute root hairs take up water from the ground, and with it substances which are held in solution. The water which contains these materials goes straight from the roots to the leaves, in which a most important process in feeding of the trees goes on—the taking up and breaking up, by the leaves, of carbonic acid gas from the air. This process goes on only in the presence of light and heat, and through the action of chlorophyll, a substance from which the leaves and the young bark get their green color. Plant cells which contain chlorophyll break up the carbonic acid gas with which they come in contact, retain the carbon, one of its elements, and send back the other, oxygen, into the air. Then, still under the influence of the sunlight, they combine the carbon with the oxygen and hydrogen of the water from the roots into new chemical compounds, in which nitrogen and the earthy constituents mentioned above are also present; the food materials which reach the tree through the roots and leaves are first digested in the leaves somewhat as food is digested in the human body, and are then sent to all living parts of the roots, stem, and crown, where they pass through another process of digestion, and then are either used at once in growth, or stored away until the proper moment arrives. This is the general rule, but it is believed that in some cases food taken up by the roots can be used without first being digested in the leaves.

HOW THE TREE BREATHES.

All plants, like all animals, breathe; and plants, like animals, breathe in oxygen and breathe out carbonic acid gas. The trees take in oxygen from the air through their leaves, and through the minute openings in the bark called lenticles, such as the oblong raised spots or marks on the

young branches of birch, cherry, and many other trees. This process of breathing goes on both day and night, but it is far less active than assimilation, which takes place only in the light. Thus through the process of assimilation and breathing, more carbonic acid gas is taken into the tree than is given out, and the sulphur carbon remains to be used in growing.

HOW THE TREE GROWS.

Except in the buds, leaves, fruit, and the twigs less than a year old, the new material which goes into the growth of the tree is deposited in a thin coat over the whole tree between the wood and the bark. The new twigs grow in length by a kind of stretching, but only during the first year. Thus a tree increases in height and in spread of branches only by means of these youngest twigs. After the first year, their length is fixed, younger twigs stretch out from the buds, and the older ones grow henceforth only in thickness. This fresh coat of new material covers them year by year.

ENEMIES OF THE FOREST.

The forest is threatened by many enemies, of which fire and reckless lumbering are the worst. In the United States sheep grazing and wind come next. Cattle and horses do much less damage than sheep, and snow break is less costly than windfall. Landslides, floods, insects and fungi are sometimes very harmful. In certain situations numbers of trees are killed by lightning, which has also been known to set the woods on fire. The forest is attacked in many other ways. For example, birds and squirrels often prevent young growth by devouring great quantities of nuts and other seeds, while porcupines and mice frequently kill young trees by gnawing away their bark. But many of the most serious dangers to the forest are of human origin, such as destrictive lumbering.

Whether grazing animals are comparatively harmless to the forest or among its most dangerous enemies depends upon the age and character of the woods as well as upon the kind of animals that graze. A young forest is always more exposed to such injury than an old one, and steep slopes are more subject to damage than more level ground. Whether the young trees are conifers, and so more likely to suffer from trampling than from being eaten, or broadleaf trees, and so more likely to be devoured, they should be protected from pasturing animals until they are large enough to be out of danger. Trampling is one of the ways in which grazing animals injure the forest. Cattle and horses do comparatively little harm, although their hoofs compact the soil and often tear loose the slender roots of small trees. Sheep, on the contrary, are exceedingly harmful, especially on steep slopes where the soil is loose. In such places their small, sharp hoofs cut and powder the soil, break and overthrow the young trees, and often destroy promising young forests altogether.

Another way in which grazing animals injure the forest is by feeding on the young trees. In the western part of the United States, where most of the forests are evergreen, this is far less important than the damage from either fire or trampling, for sheep and other animals seldom eat young conifers if they can get other food. Even where broadleaf trees prevail, browsing rarely leads to the destruction of any forest, although it

commonly results in scanty young growth, often maimed and unsound as well. Goats are especially harmful, and where they abound the healthy reproduction of broadleaf trees is practically impossible. In the United States they are fortunately not common. Cattle devour tender young shoots and branches in vast quantities, often living for months on little else, and sheep are destructive in the same way. Hogs also find a living in the forest, but they are less harmful, because a large part of their food consists of seeds and nuts. East of the Great Plains very large numbers of cattle and hogs are turned into the woods, but sheep grazing in the forest is most widely developed in the West, and especially in California, where it should be prevented altogether; in Oregon and Washington, where it should be regulated and restricted; and in some interior regions, like Wyoming and New Mexico, where it should be rigidly excluded from all steep mountain regions, and carefully regulated on more level ground.

Insects are constantly injuring the forest, just as year by year they bring loss to the farmer. Occasionally their ravages attain enormous proportions. Thus a worm, which afterwards develops into a sawfly, has since 1882 killed nearly every full-grown larch in the Adirondacks by eating away the leaves. Even the small and vigorous larches do not escape altogether from these attacks. Conifers, such as the larch and spruce, are much more likely to suffer from the attacks of insects than broadleaf trees. About the year 1876 small bark beetles began to kill the mature spruce trees in the Adirondacks, and ten years later when the worst of the attack was past, the forest was practically deprived of all its largest spruces. The pest is still at work in northern New Hampshire and in Maine.

Fungi attack the forest in many ways. Some kill the roots of trees, some grow upward from the ground into the trees and change the sound wood of the trunks to a useless rotten mass, and the minute spores (or seeds) of others float through the air and come in contact with every external part of the tree above ground. Wherever the wood is exposed there is danger that spores will find lodgment and breed disease. This is a strong reason why all wounds, such as those made in pruning, should be covered with some substance like paint or tar to exclude the air and the spores it carries.

The effect of wind in the virgin forest is not wholly injurious. Although in many regions it overthrows great numbers of old trees, their removal is usually followed by a vigorous young growth where the old trees stood. In this way the wind helps to keep the forest full of young and healthy trees. But it also breaks and blows down great numbers of useful growing members of the forest. Much of this windfall occurs among shallow-rooted trees, or where the ground is soft because soaked with water, or where the trees have been weakened by unsoundness or fire. Some storms are strong enough to break the trees they can not overthrow. Damage from wind is not uncommon in many parts of the United States, and in places the loss from it is very serious.

Snow often loads down, breaks and crushes tall young trees, especially if wet snow falls heavily before the broadleaf trees have shed their foliage in the fall. Such injury is difficult to guard against, but it is well to know that very slim, tall trees suffer more than those whose growth in diameter and height have kept better pace with each other. In many regions snow

is so useful in protecting the soil and the young trees that the harm it does is quite overbalanced by its benefits.

Of all the foes which attack the woodlands of North America, no other is so terrible as fire. Forest fires spring from many different causes. They are often kindled along railroads by sparks from the locomotives. Carelessness is responsible for many fires. Settlers and farmers clearing land or burning grass and brush often allow the fire to escape into the woods. Some one may drop a half-burned match or the glowing tobacco of a pipe or cigar, or a hunter or prospector may neglect to extinguish his camp fire, or may build it where it will burrow into the thick duff far beyond his reach, to smoulder for days or weeks, and perhaps to break out as a destructive fire long after he is gone. Many fires are set for malice or revenge, and the forest is often burned over by huckleberry pickers to increase the next season's growth of berries, or by the owners of cattle or sheep to make better pasture for their herds.

There is danger from forest fires in the dry portions of the spring and summer, but those which do most harm usually occur in the fall. At whatever time of the year they appear, their destructive power depends very much on the wind. They can not travel against it except when burning up hill, and not even then if the wind is strong. The wind may give them strength and speed by driving them swiftly through unburned, inflammable forests, or it may extinguish the fiercest fire in a short time by turning it back over its path, where there is nothing left to burn. In fighting forest fires the wind is always the first thing to consider, and its direction must be carefully watched. A sudden change of wind may check a fire, or may turn it off in a new direction and perhaps threaten the lives of the men at work by driving it suddenly down upon them.

In the majority of forest fires the destruction of the timber is a more serious loss, by far, than that of the cattle and buildings, for it carries with it the impoverishment of a whole region for ten or even hundreds of years afterwards. The loss of the stumpage value of the timber at the time of the fire is but a small part of the damage to the neighborhood. The wages that would have been earned in lumbering, added to the value of the produce that would have been purchased to supply the lumber camps, and the taxes that would have been devoted to roads and other public improvements, furnish a much truer measure of how much, sooner or later, it costs a region when its forests are destroyed by fire.

The Peshtigo fire of October, 1871, covered an area of over 2,000 square miles in Wisconsin, and involved a loss, in timber and other property, of many millions of dollars. Between 1,200 and 1,500 persons perished, including nearly half the population of Peshtigo, at that time a town of 2,000 inhabitants.

THE TREES.

By Lucy Larcom.

Time is never wasted listening to the trees;
If to heaven as grandly we arose as these,
Holding toward each other half their kindly grace,
Haply we were worthier of our human place.

Bending down to meet you on the hillside path;
Birch, and oak, and maple, each his welcome hath;
Each his own fine cadence, his familiar word,
By the ear accustomed, always plainly heard.

For every tree gives answer to some different mood;
This one helps you climbing; that for rest is good;
Beckoning friends, companions, sentinels they are;
Good to live and die with, good to greet afar.

Dear, inspiring, friendly dwellers of the woods,
Always reaching downward, something grand or good
From the lofty space where you breathe and live;
Royally unconscious, careless what you give!

O ye glorious creatures, heirs with us of earth!
Might we win the secret of thy loftier birth—
From our depths of being grow like you and climb
To our heights of blessing—life would be sublime!

THE OAK.

A traveler through a dusty road
  Strewed acorns on the lea;
And one took root and sprouted up
  And grew into a tree.
The dormouse loved its dangling twigs,
  The birds sweet music bore,
It stood a glory in its place
  A blessing evermore.

THE CHERRY TREE.

By Longfellow.

Sweet is the air with budding leaves,
And the valley stretching far below
Is white with blossoming cherry trees,
As if just covered with the lightest snow.

THE WILLOW.

By Eben E. Rexford.

The green leaves in the willows
Laugh out their glad surprise.

By Celia Thaxter.

By the swift river's flood
The willows golden blood
Mounts to the highest spray,
More vivid day by day.

THE ELM.

By Holmes.

The elms have robed their slender sprays
With full-blown flower and embryo-leaf,
Wide o'er the clasping arch of day
Soars like a cloud their hoary chief.

THE POPLAR.

The poplar drops beside the way
Its tasseled plumes of silver-gray.

SPRING.

By Celia Thaxter.

The alder by the river
Shakes out her powdery curls;
The willow buds in silver
For little boys and girls.

The little birds fly over
And oh, how sweet they sing!
To tell the happy children
That once again 'tis spring.

And just as many daisies
As their soft hands can hold
The little ones may gather,
All fair in white and gold.

Here blows the warm, red clover,
There peeps the violet blue;
O, happy little children,
God made them all for you.

By Robert Burns.

Now Nature hangs her mantle green
On every blooming tree.

AN EXTRACT FROM "ARBOR DAY."

By John Gilmore Chafee, Greencastle.

O, let us plant a tree! each one a tree,
Whose spreading roots shall pierce the mellow mold,
Whose buds shall odorize the vernal air,
Whose trembling leaves shall fan the summer breeze;
A tree, beneath whose cooling shade at noon,
When the wide air doth flame with sultry heat—
The weary pilgrim may sit down and rest;
A tree, where insects may disport at noon,
Or shelter from the night, or beating storm—
Where birds may come to build their nests and sing,
And dulcet winds may play at harmonies
That to the meditative mind do breathe
A sweeter music than the viol strains
That time the dancer's gay and flying feet—
Music sweeter than aught save that that drips
From the soft melody of flowing brooks.
O, let us plant a tree, each one a tree,
For fruitage or delight, for human need
Provisional, or to adorn the scene
And make the world more bright and beautiful;
A tree where light and shade swift interchange
'Mid ceaseless motion of the swaying green;
A tree whose image shall impress itself
In many happy minds, a memory
Of joy when life grows weary in the way.
For thoughts of purity and beauty rest
The mind, as tree shades rest the weary form.
O, why not plant a tree, to live and grow
When planting hands shall crumble into dust?
A clumsy hand may plant a graceful tree,
And thus add grace and beauty to the world.
Cover the scion's roots with mellow mold,
And nature's hand will nurture up the tree
Lifting its royal coronal on high.

THE BLOSSOMS ON THE TREES.

By James Whitcomb Riley.

(By permission of Bowen-Merrill Co.)

Blossoms crimson, white or blue,
Purple, pink, and every hue,
From sunny skies to tintings drowned
In dusky drops of dew,

I praise you all, wherever found,
And love you through and through—
But, Blossoms on the Trees,
With your breath upon the breeze,
There's nothing all the world around
That's half as sweet as you!

Could the rhymer only wring
All the sweetness to the lees
Of all the kisses clustering
In juicy Used-to-be's,
To dip his rhymes therein and sing
The blossoms on the trees—
"O, Blossoms on the Trees,"
He would twitter, trill and coo,
"However sweet, such songs as these
Are not as sweet, as you;
For you are blooming melodies
The eyes may listen to!"

FOR INTRODUCTION OF ARBOR DAY PROGRAM.

By Lizzie M. Hadley.

When April's golden sunbeams
Have melted ice and snow,
And all the buds are swelling,
And the rivers cease to flow,

'Tis then you'll hear a bustle,
A sound o'er all the land,
And you'll see the little children
Start up on every hand.

We are like a mighty army,
Our banners, fair green trees,
That wave and bend and rustle,
With every passing breeze.

As from the blue Atlantic,
To the far Pacific Coast,
Then north and southward marching,
You may see this mighty host.

First, to preserve the forests,
The woodman's axe we'll stay;
And then you'll see us planting
New trees on Arbor Day.

FOREST TREES.

Mother Truth's Melodies.

Children have you seen the budding
  Of the trees in valleys low?
Have you watched it creeping, creeping
  Up the mountain, soft and slow?
Weaving there a plush-like mantle,
  Brownish, grayish, reddish green,
Changing, changing, daily, hourly,
  Till it smiles in emerald sheen?

Have you watched the shades so varied,
  From the graceful, little white birch,
Faint and tender, to the balsam's
  Evergreen, so dark and rich?
Have you seen the quaint mosaics
  Gracing all the mountain sides,
Where they, mingling, intertwining,
  Sway like softest mid-air tides?

Have you seen the autumn frostings
  Spread in all the leafage bright,—
Frostings of the rarest color,
  Red and yellow, dark and light?
Have you seen the glory painted
  On the mountain, valley, hill,
When the landscape, all illumined,
  Blazons forth His taste and skill?

Have you seen the foliage, dropping,
  Tender cling, as loth to leave
Mother trees that taught theam deftly
  All their warp and woof to weave?
Have you seen the leafless branches
  Tossing wildly 'gainst the blue?
Have you seen the soft gray beauty
  Of their wintry garments' hue?

Have you thought the resurrection
  Seen in Nature year by year.
Is a symbol of our rising
  In a higher, holier sphere?
Children, ye are buds maturing:
  Make your autumn rich and grand,
That your winter be a passage
  Through the gates to glory-land.

FORESTS.

By John M. Coulter, Ph. D., Head Professor of Botany, University of Chicago.

Forests have always been admired, and in ancient times they were often considered sacred, the special dwelling places of gods and various strange beings. We can easily understand how forests thus affected men. There is a solemnity about them, a quiet grandeur, which is very impressive, and the rustling of their branches and leaves has that mysterious sound which caused the ancients to people them with spirits. We still recognize the feeling of awe that comes in the presence of forests, although we have long since ceased to explain it by peopling them with spirits.

Once forests covered all parts of the earth where plants could grow well, and no country had greater forests than North America. When America was discovered, there was a huge, unbroken forest from the Atlantic west to the prairies. Now much of this has been cut away, and we see only small patches of it. Men must use the forest, and still they must save it, and they are now trying to find out how they may do both.

Forests are sometimes almost entirely made up of one kind of tree, and then they are called "pure forests." Pine and beech forests are examples of this kind. More common with us, however, are the "mixed forests," made up of many kinds of trees, and nowhere in the world are there such mixed forests as in our Middle States, where beech, oak, hickory, maple, elm, poplar, gum, walnut, sycamore, and many others all grow together.

Probably the densest forests in the world are those in the Amazon region of South America. So dense are they that hardly a ray of light ever sifts through the dense foliage, and even at noon there is only a dim twilight beneath the trees. The tallest forests are the Eucalyptus forests of Australia, where the trees rise with slender trunks to the height of four or five hundred feet. But the largest trees in the world, when we consider both height and diameter, are the giant "redwoods" (Sequoias) of the Pacific coast. All concede, however, that the most extensive, the most varied, and the most beautiful forests of the world are those of the Atlantic and Middle States.

Perhaps it is well to understand how a tree lives, that we may know better what a forest means. The great roots spread through the soil, sometimes not far from the surface, at other times penetrating deeply. The young root tips are very sensitive to the presence of moisture, and turn towards it, no matter in what direction it may carry them. In penetrating the soil the sensitive root tips are turned in every direction by various influences of this kind, and as a result, when the root system becomes old, it looks like an inextricable tangle. All this tangle, however, but represents the many paths that the root tips followed in their search for the things which the soil contains.

Roots are doing two things for the tree: They anchor it firmly in the soil, and also absorb material that is to help in the manufacture of food. It is the older roots that have long since stopped absorbing that are the chief anchors. How firm this anchorage must be we can, perhaps, imagine when we think of the strain produced by a great crown of leaves

swaying back and forth in the wind. It is only a cyclone that seems to be able to overthrow a sound tree, and then it more commonly breaks its trunk than uproots it.

The very important work of absorbing is given over to the very young roots; in fact, chiefly to those of this year, for new rootlets must be put out each year. These roots can only absorb water, so that if they are to get anything from the soil it must be something that water will dissolve. In this way the water is used as the carrier of soil-material into the root. Just how this water carrying soil-material gets into the root is not easy to explain, for the root has no holes to let it in, and it must pass through living walls. That it does enter, however, every one knows. It is evident, therefore, that the root is supplying to the tree two kinds of raw material for food manufacture obtained from the soil, namely, water and soil-material dissolved in it.

But the tree does not obtain all its raw material from the soil. A very important material is taken from the air, the material commonly called "carbonic acid gas," the same material that we breathe out so abundantly from our lungs as one of our body wastes. This important material is taken out of the air into the plant chiefly by means of the leaves. Spread out as they are in the air, the leaves are in the most favorable position for doing this work.

But where and how are these three kinds of raw material manufactured into plant food? The leaves are specially constructed to be the chief seat of this food manufacture. The carbon gas is received directly into these manufactories from the air, but the water and the soil-material are down in the roots, and it is necessary for them to be carried to the leaves. As a consequence, a "current" of water containing soil-material ascends from the roots, through the stem, and is distributed through the branches to the leaves. This movement is generally known as the "ascent of sap." The path of this movement in the stem is through what is known as the "sap wood," and it is this very fact which gives to this region of the wood its peculiar character. Just how the sap ascends through the stem and reaches the leaves, no one knows. All of our explanations have proved unsatisfactory, and only those who are not fully acquainted with the facts claim to be able to explain it.

When the sap reaches the leaves, the water is no longer needed as a carrier of soil-material. Some of it is needed in the manufacture of food, but by far the greater part of it escapes from the leaves into the air by a process which may be called "plant evaporation." The amount of water thus brought from the soil and poured out into the air by active plants is very great; and when we consider a forest at work, we can hardly compute the vast amount of moisture which it is constantly contributing to the air during the growing season.

The three kinds of raw material thus brought together chiefly in the leaves are there manufactured into plant food. On account of this work the leaves have often been spoken of as the "stomachs" of the plant. This is a very incorrect and misleading illustration, for the work referred to is not digestion such as a stomach is concerned with, and, in fact, it is a process entrely unknown in animals, and found only in green plants. It is a wonderful process, which we do not all understand, but it consists in taking this dead raw material from the soil and air and manufacturing

out of it living material. Not only does the food of the plant, and hence its life, depend upon this process, but all the life of the world, as we understand it, depends upon it. We know at least two prominent conditions of this process, for it seems evident that it can not take place without light and the peculiar green substance which gives the characteristic color to leaves. With the help of light and this green coloring substance, known as "chlorophyll," the living substance in the leaves is able to do this marvelous work.

The food thus manufactured is distributed throughout the tree, either to be used wherever growth is going on, or to be stored up. While we may say that there is an "ascending current" of sap through the sap wood, it is an error to say that there is a "descending current." The movement of prepared food has no definite channel, but is drawn in every direction wherever needed.

If we now consider the parts of a tree all together, we may be able to get some notion of the meaning of their positions. The roots must be related to the soil to secure anchorage and raw material for food manufacture. The leaves must be related to the air and light to secure more raw material and help in doing their important work of food manufacture. The stem is simply to carry the leaves well up into the air and sunshine, and has no meaning except as it is related to the work of the leaves. In thus widely separating the roots and the leaves, the stem must act as a channel of communication between them.

In the tree trunks with which we are familiar, every one has observed the concentric rings of wood that appear in a cross-section. These are usually spoken of as "annual rings," with the idea that one ring is made each year. In consequence of this it is the habit to estimate the age of a tree by counting these rings. Not infrequently it happens, however, that more than one ring may be made in a year, as a ring represents a single season of growth, and there may be more than one season of growth during a single year. It is much better to call them "growth rings," and to recognize the fact that by counting them we may be over-estimating the age of a tree.

One of the most noticeable things about the principal trees of our temperate climate is that they "shed" their leaves every year, being covered with foliage during the growing season and bare during the winter. This is known as the "deciduous" habit, such trees are called deciduous trees, in distinction from "evergreen" trees. This is really a habit, brought about by the conditions in which trees of temperate climates must live. The leaves of such trees are broad and thin, fitted for very active work. When the winter comes, they would be entirely unable to endure it. The tree might protect them by giving them narrow forms and thick walls (as in pines), but it would be at the expense of activity during the growing season. It is more economical for the tree to make an entirely new set of leaves each year than to protect the old ones.

Perhaps the most noticeable feature in connection with the fall of the leaves is that so many of them take on a rich coloration. Our mixed American forest is the most brilliantly colored autumnal forest in the world, and there can be no landscapes richer in color than those which include such a forest. While all this should appeal to our sense of the beautiful, it should raise the question as to what it means in the life of

the trees. We are not at all sure that we know, for we can not as yet explain the conditions which cause the colors to be produced. We observe that they occur towards the end of the activity of the leaf, but that they are necessarily associated with cold, or drought, or certain outside conditions, is not at all clear. The colors are various shades of red and yellow, sometimes pure, sometimes mixed. It has been recently suggested that the red color is to serve as a protection. It is known that before the fall of the leaf the living substances are gradually withdrawn into the permanent parts of the tree, and that when these living parts cease to work they are peculiarly helpless. At this unprotected period the red appears, and this color absorbs enough heat from the light to raise the temperature, and so the needed protection against chill is afforded. This seems reasonable, but the whole subject of the meaning of plant colors is very obscure.

PLANT TREES AND PROTECT THE BIRDS.

By Mabel Osgood Wright.

When we cut down a tree without planting another we make the world poorer. Trees are not only things of beauty, but they give us shade, fuel and wood for house-building and furnishing. Besides these benefits trees protect our rivers and water-courses from drying away. A treeless land is a dry, weary, unfruitful country.

We may plant trees or carefully guard those already grown, but we can not always protect them from their insect enemies. We may spray the fruit trees in garden or orchard, but who can protect the woodlands or check the insects in grain or hay fields but the birds? The birds that Nature has decreed shall do this work and has therefore banded into guilds to patrol the earth, trees and sky.

It seems very strange that it is necessary to ask protection for these able workmen, but many people seem to think that the supply of wild birds is inexhaustible, that they may be shot and their nests robbed at will, and still that they will appear each spring from some mysterious place.

Country children should be wiser than this; do they not all know that if setting hens are robbed there will be no chickens in the poultry yard? Therefore, if birds' nests are robbed, where are the birds to come from? The fact is that too few children realize just what damage they are doing in meddling with eggs; they do not seem to understand that—

"The blue eggs in the robin's nest
Will soon have beak and wings and breast
And flutter and fly away."

They covet those eggs and take them, and so until they understand, the law of the State wisely says that it means to stop this robbery and prevent bird families from being broken up, and every child in the land can do something to uphold the law and aid it in protecting the birds.

PLANT TREES.

Lines written for an agricultural exhibition in 1858, by John G. Whittier.

This day, two hundred year ago,
The wild grape by the river's side
And tasteless groundnut trailing low,
The table of the woods supplied.

Unknown the apple's red and gold,
The blushing tint of peach and pear;
The mirror of the Powow told
No tale of orchards ripe and rare.

Wild as the fruits he scorned to till,
These vales the idle Indian trod;
Nor knew the glad creative skill,—
The joy of him who toils with God.

O Painter of the fruits and flowers!
We thank thee for thy wise design
Whereby these humble hands of ours
In Nature's garden work with thine.

And thanks that from our daily need,
The joy of simple faith is born;
That he who smites the summer weed,
May trust thee for the autumn corn.

Give fools their gold and knaves their power;
Let fortune's bubbles rise and fall;
Who sows a field or trains a flower,
Or plants a tree, is more than all!

For he who blesses most is blest,
And God and man shall own his worth
Who toils to leave as his bequest,
An added beauty to the earth.

And soon or late to all that sow,
A time of harvest shall be given;
The flowers shall bloom, the fruit shall grow,
If not on earth, at last in heaven.

MY FAVORITE TREE.

[If possible, let each pupil carry a branch of the trees he describes.]

First Pupil—

"I speak for the elm. It is a noble tree. It has the shape of a Greek vase and such rich foliage running down the trunk to the very roots, as if a vine were wreathed about it."

Second Pupil—

"My favorite is the maple. What a splendid cupola of leaves it builds up into the sky. And in autumn, its crimson is so rich one might call it the blush of the woods!"

Third Pupil—

"The birch is a tree for me. How like a shaft of ivory it gleams in the daylight woods! How the moonlight turns it into pearl!"

Fourth Pupil—

"What a tree is the oak! First a tiny needle, rising toward the sun, a wreath of green to endure for ages. The child gathers the violet at its foot; as a boy, he pockets the acorns; as a man, he looks at its towering heights and makes it the emblem of his ambition."

Fifth Pupil—

"The oak may be the king of the lowlands, but the pine is king of the hills. There he lifts his haughty head like a warrior and when he is roused to meet the storm, the battle cry he sends down the wind is heard above all the voices of the greenwood."

All—

Hail to the trees!
Patient and generous, mothers of mankind;
Arching the hills, the minstrels of the wind,
Spring's glorious flowers and summer's balmy tents.
A sharer in man's free and happier sense.
The trees bless all, and then, brown-mantled, stand,
The sturdy prophets of a golden land.

—Selected.

WHO STOLE THE BIRD'S NEST.

By Maria Child.

[An exercise for six pupils.]

First Pupil—

"To-whit, to-whit, to-whee!
Will you listen to me?
Who stole four eggs I laid,
And the nice nest I made?"

Second Pupil—

"Not I," said the cow, "moo-oo!
Such a thing I'd never do.
I gave you a wisp of hay
But didn't take your nest away."

Third Ppuil—

"Not I," said the dog; "bow-wow!
I wouldn't be so mean anyhow.
I gave hairs the nest to make
But the nest I did not take."

Fourth Pupil—

"Not I," said the sheep, "oh, no!
I wouldn't treat a poor bird so.
I gave the wool the nest to line,
But the nest was none of mine."

Fifth Pupil—

"Cluck, cluck!" said the hen;
"Don't ask me again;
I haven't a chick
That would do such a trick."

Sixth Pupil—

"I would not rob a bird,"
Said little Mary Green;
"I think I never heard
Of anything so mean."

All—

A little boy hung down his head,
And went and hid behind the bed;
For he stole that pretty nest,
From poor little yellow breast;
And he felt so full of shame,
He didn't like to tell his name.

THE OAK TREE.

By Mary Howitt.

Sing for the oak tree,
The monarch of the wood;
Sing for the oak tree,
That groweth green and good;
That groweth broad and branching
Within the forest shade;
That groweth now, and yet shall grow
When we are lowly laid.

The oak tree was an acorn once,
And fell upon the earth;
The sun and showers nourished it,
And gave the oak tree birth,—
The little sprouting oak tree!
Two leaves it had at first,
Till sun and showers had nourished it,
Then out the branches burst.

The little sapling oak tree!
Its root was like a thread
Till the kindly earth had nourished it,
Then out it freely spread;

On this side and on that side
It grappled with the ground;
And in the ancient, rifted rock
Its firmest footing found.

The winds came and the rains fell;
The gusty tempest blew;
All, all were friends to the oak tree,
And stronger yet it grew.
The boy that saw the acorn fall,
He feeble grew and gray;
But the oak was still a thriving tree,
And strengthened every day!

Four centuries grows the oak tree,
Nor does its verdure fail;
Its heart is like the iron-wood,
Its bark like plated mail.
Now, cut we down the oak tree,
The monarch of the wood;
And of its timbers stout and strong
We'll build a vessel good!

The oak tree of the forest
Both east and west shall fly;
And the blessings of a thousand lands
Upon our ship shall lie!
For she shall not be a man-of-war,
Nor a pirate shall she be—
But a noble, Christian merchant-ship
To sail upon the sea.

Then sing for the oak tree,
The monarch of the wood;
Sing for the oak tree
That groweth green and good;
That groweth broad and branching,
Within the forest shade;
That groweth now, and yet shall grow,
When we are lowly laid!

WHEN THE GREEN GETS BACK IN THE TREES.

By James Whitcomb Riley.

In the spring when the green gits back in the trees,
And the sun comes out and stays,
And your boots pull on with a good tight squeeze
And you think of your barefoot days;

When you ort to work and you want to not,
  And you and your wife agrees
It's time to spade up your garden lot—
  When the green gits back on the trees,
  Well, work is the least of my idees
When the green, you know, gits back on the trees.

When the green gits back in the trees and bees
  Is a buzzin' aroun' agin,
In that kind of a "Lazy-go-as-you-please"
  Old gait they hum roun' in;
When the groun's all bald where the hayrick stood
  And the crick's riz, and the breeze
Coaxing the bloom in the old dogwood,
  And the green gits back in the trees—
  I like, as I say, in such scenes as these,
The time when the green gits back on the trees.

When the whole tail feathers o' winter time
  Is pulled out and gone,
And the sap it thaws and begins to climb,
  And the sweat it starts out on
A feller's forrerd, a-gitten' down
  At the old spring on his knees—
I kind o' like jes' a loaferin' aroun'
  When the green gits back in the trees—
  Jes' a-potterin' roun' as I-durn-please,
When the green, you know, gits back in the trees.

SELECTIONS.

For convenience of teachers who have access to libraries, the following list of selections, which are not printed in this circular, is given:

The Holly Tree ..... Southey
Woods in Winter ..... Longfellow
Mountain Daisy ..... Burns
Forest Song ..... Venable
Forest Trees ..... Cook
Among the Trees ..... Bryant
In a Forest ..... Southey
Under the Willows ..... Lowell
Little Acorn ..... Mrs. Huntington
Building of a Ship ..... Longfellow
Song to the Trees ..... Miller
In the Sugar Camp ..... Alice Cary
The Planting of the Apple Tree ..... Bryant
The Elm Tree and the Vine ..... Bryant
The Last Walk in Autumn ..... Whittier
The Reaper and the Flowers ..... Longfellow
The Palm Tree ..... Whittier

Under the Violets.....Holmes
The Willow.....Mrs. Hemans
To a Pine Tree.....Lowell
Summer Woods.....Mary Howitt
Golden Rod.....Elaine Goodale
Historic Trees.....Delano
Autumn Woods.....Bryant
The Lumberman.....Whittier
Jack-in-the-Pulpit.....Whittier
Our Almanac.....T. B. Aldrich
The Voice of the Grass.....Sarah Roberts
The Ivy Green.....Charles Dickens
The Story of the Morning-Glory Seed.....St. Nicholas, '88
The Arab to the Palm.....Bayard Taylor
The Greenwood Tree.....Shakespeare
Under the Washington Elm, Cambridge.....Holmes
An April Day.....Longfellow
The Oak.....Lowell

If you find it impossible to prepare a program of exercises for Arbor Day, plant the trees without one.

THE PLEDGE.

Teachers may easily organize branch Audubon Societies by copying the pledge and letting the children who are willing sign their names below. The pledge is as follows:

"Being in sympathy with the purposes of the Audubon Society, I agree not to kill birds (excepting game birds), nor to rob their nests; and not to wear feathers other than quills, cock's tails and ostrich plumes."

Teachers should keep a list of members and send the number of the same to the State Superintendent of Public Instruction at Indianapolis.

BIRD DAY PROGRAM.

The teacher should provide for the reading of "Redruff" or "Silverspot," both written by Earnest Seton-Thompson, or "The Quail or Crow Ways," by Mr. Long, in "Ways of Woodfolk," a book on the Reading Circle list for this year.

HOW THE WOODPECKER KNOWS.

By William J. Long.

How does he know where to dig his hole,
The woodpecker there on the elm tree hole?
How does he know what kind of a limb
To use for a drum, and to burrow in?
How does he find where the young grubs grow—
I'd like to know?

The woodpecker flew to a maple limb,
And drummed a tattoo that was fun for him,
"No breakfast here! It's too hard for that,"
He said, as down on his tail he sat,
"Just listen to this: rrrrr rat-tat-tat."

Away to the pear tree, out of sight,
With a cheery call and a jumping flight,
He hopped around till he found a stub,
"Ah, here's the place to look for a grub,
'Tis moist and dead—rrrr rub-dub-dub."

To a branch on the apple, Downy hied,
And hung by his toes to the under side,
"'Twill be sunny here in this hollow trunk;
It's dry and soft, with a heart of punk,
Just the place for a nest—rrrrrunk-tunk-tunk."

"I see," said the boy. "Just a tap or two,
Then listen as any bright boy might do,
You can tell ripe melons, and garden stuff,
In the very same way—it's easy enough."

THE NORTH STORY OF HOW THE ROBIN GOT ITS RED BREAST.

Flora Cook's Myths.

[Let some child tell this story.]

Long ago, in the far north, where it is very cold, there was only one fire.

An old man and his little son took care of this fire and kept it burning day and night. They knew that if the fire went out all the people would freeze and the white bear would have the northland all to himself.

One day the old man became very ill, so that his son had everything to do. For many days and nights the boy bravely took care of his father and kept the fire burning. At last he got so tired and sleepy that he could no longer walk.

Now, the white bear was always watching the fire.

He longed for the time when he should have the northland all to himself.

When he saw how tired and sleepy the little boy was, he stayed close to the fire and laughed to himself.

One night the poor little boy could keep awake no longer and fell fast asleep.

Then the white bear ran as fast as he could and jumped upon the fire with his wet feet and rolled upon it.

At last he thought it was all out and went happily away to his cave.

But a gray robin had been flying near and had seen what the white bear was doing.

She waited until the bear had gone away.

Then she flew down and searched with her sharp little eyes until she found a tiny live spark.

For a long time she patiently fanned this little spark with her wings.

Her little breast was scorched red, but she did not give up.

After a while a fine, red blaze sprang up. Then she flew away to every hut in the northland.

Everywhere that she touched the ground a fire began to burn.

So that soon instead of one little fire, the whole northland was lighted up.

Now, all that the white bear could do was to go back further into his cave and growl.

For now, indeed, he knew that the northland was not all for him.

And this is the reason why the people in the north country love the robin. And they are never tired of telling their children how it got its red breast.

A NEST IN A POCKET.

From "Lights to Literature."

A little bird went to and fro,
  In spring, the nesting season,
And sought for shelter high and low,
  Until, for some queer reason,
She flew into a granary,
  Where on a nail suspended,
The farmer's coat she chanced to see,
  And then her search was ended.

The grain was heaped up to the loft;
  There not a creature met her;
The coat had hollows, deep and soft—
  Could anything be better?
And where it hung, how safe it was,
  Without a breeze to rock it!
Come, busy little beak and claws,
  Build quick inside a pocket!

Three speckled eggs soon warmly lay
  Beneath the happy sitter;
Three little birds—oh, joy!—one day
  Began to chirp and twitter,
And then—ah, can you guess the tale?—
  The farmer came one morning,
And took the coat down from the nail
  With a word of warning!

Poor little, frightened motherling!
Out of her nest she fluttered,
And each unfledged, small downy thing
Its terror, piping, uttered.
The good man started back aghast,
But merry was his wonder
When, in the pocket, he at last
Found such unlooked for plunder.

He put the coat back carefully;
"'Tis well I have another;
You need not be afraid of me,
You bright-eyed little mother.
I know just how you feel, poor thing,
For I have youngsters, bless you!
There—stop your foolish fluttering—
Here, no one shall distress you."

Then cheerfully he walked away
To tell his wife about it—
How in the coat the nestlings lay,
And he must do without it.
She smiled, and said she knew he could,
And so, all unmolested,
The mother birdie and her brood
Safe in the pocket rested

Till all the wings were set
In proper flying feather,
And then there was a nest to let,
For off they flocked together;
The farmer keeps it still to show,
And says that he's the debtor;
His coat is none the worse, you know,
While he's—a little better.

THE QUAIL'S NEST.

By Edith M. Thomas.

Many a foot in the rustling meadow
Strode onward and never stayed;
In place of the harvester's swinging sickle,
Flashed many a warlike blade;
While here a plume and there a banner,
On the stream of the light wind swayed.

The brooding mother of nestlings many
Called them again and again,
And her heart beat fast with fear and sorrow,
For the mother call was vain,
As on their callow wings they fluttered—
Up from the grassy plain.

Fluttered and wavered and would have fallen,
But, as on the battalion pressed,
Many a soldier grim or smiling,
Welcomed a downy guest,
And under his blouse of blue was sheltered
The waif from a ruined nest.

"'Tis a sign of good luck," cried one blithe spirit,
"'Tis a sign we shall win the day;"
And one as he shielded the fluttering truant,
Thought of nestlings far away;
Then they all swept on where, under the smokewreath,
The fire of the battle lay.

At evening the heavy heart of a soldier
Under his blouse grew light,
When he saw how the quail-mother's sleepy darling
Had folded its wings for the night:—
'Twas the soldier who thought of his own dear nestlings
That morn, as he entered the fight.

OUR LITTLE MARTYRS.

By George Klingle.

Shall we care when nesting-time
Brings no birds from any clime;
Not a voice or ruby wing,
Not a single nest to swing,
Midst the reeds, or higher up,
Like a dainty fairy-cup;
Not a single little friend,
All the way, as footsteps wend
Here and there through every clime,
Not a bird at any time?

Does it matter? Do we care
What the feathers women wear
Cost the world? Must all birds die?
May they never, never fly
Safely through their native air?
Slaughter meets them everywhere.

Scorned be the hands that touch such spoil!
Let women pity and recoil
From traffic barbarous and grave,
And quickly strive the birds to save.

BOBOLINK.

By Thomas Hill.

Bobolink? still may thy gladness
Take from me all taints of sadness;
Fill my soul with trust unshaken
In that Being who has taken
Care for every living thing
In summer, winter, fall and spring.

BOB WHITE.

By George Cooper.

There's a plump little chap in a speckled coat,
And he sits on the zigzag rails remote,
Where he whistles at breezy, bracing morn,
When the buckwheat is ripe, and stacked the corn:
"Bob White! Bob White! Bob White!"

Is he hailing some comrade as blithe as he?
Now I wonder where Robert White can be!
Over the billows of gold and amber grain
There is no one in sight—but, hark again:
"Bob White! Bob White! Bob White!"

Ah! I see why he calls; in the stubble there,
Hide his plump little wife and babies fair!
So contented is he, and so proud of the same,
That he wants all the world to know his name:
"Bob White! Bob White! Bob White!"

HOW THE BIRD WORKS FOR US.

By Olive Thorne Miller.

Many times in this book I have spoken of the great value of the services of birds, in helping us destroy insects and weeds that injure our crops. But there is more to be said about it.

From morning till night, almost the whole of his life, nearly every bird is working for us. He does not know he is working for us, of course. He is simply hunting for the food he likes, and what is good for young birds to eat.

But what he chooses to eat himself, and to feed the young, consists mostly of creatures that destroy our fruit and vegetables, caterpillars that eat the leaves off our trees, worms that get into our apples and berries, beetles that spoil our roses and our potatoes, mice that eat our crops, and all the worms and grubs that gardeners and farmers are all the time fighting.

As I have already said, some of the birds like cherries and green peas, and other things we prefer to keep for ourselves. But we should never forget that they have earned, by their work among the worms, all they can take.

I say this, not merely because I love the birds, and want to have them live and be happy, but because it is true. It has been proved true by scientific men in the service of the United States government.

These men have had thousands of birds killed to see what they were eating; and they have found out that nearly every bird they have examined—blackbirds, cedarbirds, blue jays, hawks, owls, even crows—do us more good by the injurious creatures they destroy than harm by the fruits and vegetables they eat. To this there is, among the small birds, but one exception, the English sparrow, and, of the large ones, only the two hawks and one owl, mentioned on page 53.

Chickadees like to eat the eggs of canker-worms; and for a single meal one of these tiny birds will eat two hundred and fifty eggs, and he will take several meals a day. Now canker-worms destroy our apples. When they get into an orchard in force, it looks, as Miss Merriam says, as if it had been burned over.

Robins, catbirds, and shirks, and several others, like to eat cutworms, which destroy grass and other plants. As many as three hundred of them have been found in the stomach of one robin, of course for one meal. Ants are very troublesome in many ways, and three thousand of them have been taken from the stomach of one flicker.

Rats and mice, ground squirrels and gophers, make great havoc in our crops, and farmers spend much time and labor trying to get rid of them; but these creatures are the favorite food of most hawks and owls.

If the farmer would stop shooting the birds, and protect them instead, they would do this work for him, and much better than he can. But because (as I said in a former chapter) one or two hawks and owls have a taste for chickens, he generally kills every hawk and owl he sees, and for this folly has to spend half his time trying to kill the little animals they would gladly have eaten.

A great deal of refuse, dead sea creatures, and other matter, is thrown up on the seashore, or floats on the water. On this feed the water birds—herons, gulls, terns and others. If this were not disposed of, it would make us sick. Indeed, on the shores where so many herons have been killed, to get their plumes for ladies' hats, the result has been sickness and death among the people, as Dr. Gaumer, of Yucatan, told Mr. Chapman.

Besides the work they do for us in destroying animal life, their seed-eating is almost as useful. As I said, they eat the seeds of weeds that farmers and gardeners are all the time laboring to keep down, so that useful plants may have a chance to grow.

The whole family of finches, sparrows, buntings, grosbeaks, and all birds with the high, thick bill, though they eat largely of insects through the summer, and feed their nestling on them, when insects get scarce and weed seeds are ripe, they turn to them for food. They eat the seeds of all kinds of troublesome weeds; and as each single seed might produce a plant, we can not guess how much they destroy.

Professor Beal, who is at the head of this government inquiry into the

food of birds, and who knows what he is talking about, says that one species of little bird—the tree sparrow—destroys every year in one of the Western States many tons of the seeds of weeds.

There is a curious and interesting fact about this seed-eating. The regular seed-eaters, the finches, prefer the seeds of weeds that are mostly harmful, and these they break up, taking off the shells, and, of course, destroying the germ, making it impossible for them to grow.

But there are many birds who eat berries having in them seeds, such as raspberries, blackberries, and all kinds of wild fruit. These birds do not crack the seeds; and, as they are hard, they do not digest in the stomach, but are dropped whole, and are ready to grow wherever they fall.

Thus while seed-eating birds destroy the weeds which are hurtful, the fruit-eaters plant the seeds of berries and fruit which we like. This is why we find wild berry bushes all over the country. We have to thank the birds for it.

A great deal more could be said about the bird's work for us. Not only the robins, and those I have spoken of, but cedarbirds, who are shot because they take part of our cherries; blackbirds, because they eat some grain; orioles, because they occasionally take green peas, and kingbirds, because they have the name of eating bees, though it has been proved that they eat only drones, which have no sting and make no honey.

Let me impress upon you two facts: First, that the harm said to be done by birds is often mere guesswork, from careless observation. For instance, a man seeing a bird going over his blossoming fruit-trees, at once concludes he is destroying the fruit, probably shoots him, and then writes to his favorite paper that a certain bird eats fruit buds. Other papers copy it, and a war against that bird begins in every orchard.

Whereas, the truth is, the bird was preserving the fruit by picking out the insects that would have spoiled it. This is no fancy picture; this very thing has happened more than once.

And again, whatever is said about the harm this or that bird does, never forget this second fact, which I repeat, and which may be relied upon as perfectly trustworthy. The officers of the government of the United States, who have carefully studied the matter and found out positively, without guesswork, what birds eat, have declared emphatically that every bird they have examined does more good by destroying pests than harm to our crops, excepting the bird we have imported—the English or house sparrow.—From "First Book of Birds." See Reading Circle Book.

HOW DO THE ROBINS BUILD THEIR NESTS?

How do the robins build their nests?
Robin Red Breast told me,
First a whisp of yellow hay
In a pretty round they lay;
Then some shreds of downy floss,
Feathers, too, and bits of moss,
Woven with a sweet, sweet song,
This way, that way, and across;
That's what Robin told me.

Where do the robins hide their nests?
Robin Red Breast told me,
Up among the leaves so deep,
Where the sunbeams rarely creep,
Long before the winds are cold,
Long before the leaves are gold,
Bright-eyed stars will peep and see
Baby robins—one, two, three:
That's what Robin told me.

—Selected.

[The following selections are suggested as suitable for the Bird Day Program.]

THE BLUE HERON.

By Maurice Thompson.

The Great Blue Heron, often called the Blue Crane, is found throughout the State, along streams and about lakes, in spring and summer. In a few localities they nest in companies. These nesting sites are called "Heronries." They are principally grayish-blue. When standing erect they are nearly four feet tall. The White Herons are also found in this State. They are generally called Egrets. Their numbers are greatly diminished by reason of the immense numbers that have been killed in Florida and elsewhere to furnish plumes for women's hats.

Where water-grass grows ever green,
  On damp, cool flats by gentle streams,
Still as a ghost and sad of mien,
  With half-closed eyes, the heron dreams.

Above him, in the sycamore,
  The flicker beats a dull tattoo;
Through paw-paw groves the soft airs pour
  Gold-dust of blooms and fragrance new.

And, from the thorn it loves so well,
  The oriole flings out its strong,
Sharp lay, wrought in the crucible
  Of its flame-circled soul of song.

The heron nods. The charming runes
  Of Nature's music fill its dreams;
The joys of many Mays and Junes
  Wash past him like cool summer streams.

What tranquil life, what joyful rest,
  To feel the touch of fragrant grass,
And doze like him, while tenderest
  Dream waves across my sleep would pass!

THE TITMOUSE.

By R. W. Emerson.

(Page 14, Poetry of Ornithology.)

The Titmouse to which Emerson alluded is the "Black-capped Chickadee." It is found throughout northern Indiana, and in the southern half of the State is replaced by the Carolina Chickadee, which resembles it very closely. These birds may be found all the year round. They are small, grayish birds, with black caps and throats. In winter they are often found in company with other small birds.

Up, and away for life! be fleet!
The forest king ties my fumbling feet,
Sings in my ears, my hands are stones,
Curdles the blood to the marble bones,
Tugs at the heart strings, numbs the sense,
And hems in life with narrowing fence.
Well in this broad bed lie and sleep,
The punctual stars will vigil keep;
Embalmed by purifying cold,
The winds shall sing their dead march old;
The snow is no ignoble shroud,
The moon thy mourner, and the cloud.

Softly—but this way fate was pointing,
'Twas coming last to such anointing,
When piped a tiny voice hard by,
Gay and polite, a chreeful cry,
Chick-chickadeed! saucy note.
Out of sound heart and merry throat,
As if it said, "Good day, good sir,
Fine afternoon, old passenger!
Happy to meet you in these places,
Where January brings few faces."

Here was this atom in full breath,
Hurling defiance at vast death;
This scrap of valor just for play,
Fronts the north wind in waistcoat gray,
As if to shame my weak behavior;
I greeted loud my little savior,
"You pet! what dost here? and what for?
At this pitch, we San Salvador!
What fire burns in that little chest,
So frolic, stout and self-possessed?
Henceforth I wear no stripe but thine;
Ashes and jet all hues outshine.

Why are not diamonds black and gray?
And I affirm the spacious north
Exists to draw thy virtues forth.
I think no virtue goes with size;
The reason of all cowardice
Is, that men are overgrown,
And, to be valiant must come down
To the titmouse dimension.
I think old Caesar must have heard
In northern Gaul my dauntless bird,
And, echoed in some frosty wold,
Borrowed by battle numbers bold.
And I will write our annals new,
And thank thee for a better clew.
I, who dreamed not when I came here
To find the antidote of fear,
Nor hear thee say in Roman key,
Paen, veni, vidi, vici."

THE BOBOLINK—"ROBERT OF LINCOLN."

By William Cullen Bryant.

(Page 16, Poetry of Ornithology.)

The bobolink is found in summer in many localities in northern Indiana. Some places it is very common. It frequents pastures, meadows and the drier marshes. The male is black, with white along its entire back. The female is grayish and brownish striped, looking somewhat sparrow-like. The male assumes the plumage of the female late in summer. In southern Indiana they are found as migrants principally in spring. From the time of their arrival until early July the male sings a beautiful song.

Robert of Lincoln is gaily drest,
Wearing a bright black wedding coat;
White are his shoulders and white his crest,
Here him call in his merry note:
Bob-o'-link, Bob-o'-link,
Spink, spank, spink;
Look what a nice white coat is mine,
Sure there never was a bird so fine.
Chee, chee, chee.

Robert of Lincoln's Quaker wife,
Pretty and quiet with plain brown wings,
Passing at home a patient life,
Broods in the grass while her husband sings;
Bob-o'-link, Bob-o'-link,
Spink, spank, spink;
Brood, kind creature, you need not fear
Thieves and robbers while I am here.
Chee, chee, chee.

THE MEADOW LARK.

By Clinton Scollard.

(Page 17, Poetry of Ornithology.)

The Meadow Lark is common throughout Indiana from early spring until winter. In the southern part of the State they are usually, and farther north rarely, found in winter also. They frequent meadows and pastures. The upper parts are buff and black striped. The throat and under parts conspicuously yellow, with a black crescent on the breast. Its striking song from fence or tree is often said by farmers to say, "Laziness will kill you." You may think it sounds like "Es-sie-de-ăr."

Born of the summer sunshine's bounteous gold,
Clear chorister in the damask courts of dawn,
From whispering winds your plaintive notes were drawn,
Some long forgotten morningtide of old,
For you the red-lipped poppy buds unfold,
For you pale shoots of spring flowers haunt the lawn,
And gracefully as does the graceful fawn,
Sweet marguerites their dainty heads uphold.

Whene'er I see you wing your fearless flight,
Across the amber amplitudes of air,
Your breast resplendent like a glowing shield,
You seem a joyous messenger of light,
Descending from heavenly kingdom where
The sainted dwell, in rapture unrevealed.

THE SANDPIPER.

By Celia Thaxter.

(Page 44, Birds and Poets.)

Several kinds of Sandpipers are to be found along the shores of the streams and lakes of Indiana in spring, summer and fall. The Spotted Sandpiper is generally distributed, and its well-known call, "Peet-peet," is to be heard about every body of water in spring and summer.

Across the narrow beach we flit,
One little Sandpiper and I;
And fast I gather, bit by bit,
The scattered driftwood, bleached and dry.
The wild waves reach their hands for it,
The wild wind raves, the tide run high,
As up and down the beach we flit—
One little Sandpiper and I.

Above our heads the sullen clouds
  Scud black and swift across the sky;
Like silent ghosts in misty shrouds
  Stand out the white lighthouses high.
Almost as far as eye can reach
  I see the close-reefed vessels fly,
As fast we flit along the beach—
  One little Sandpiper and I.

I watch him as he skims along
  Uttering his sweet and mournful cry;
He starts not at my fitful song,
  Or flash of fluttering drapery.
He has no thought of any wrong;
  He scans me with a fearless eye.
Stanch friends are we, well tried and strong,
  The little Sandpiper and I.

Comrade, where wilt thou be tonight
  When the loosed storm breaks furiously?
My driftwood fire will burn so bright!
  To what warm shelter canst thou fly?
I do not fear for thee, though wroth
  The tempest rushes through the sky:
For are we not God's children both,
  Thou little Sandpiper and I.

THE YELLOW THISTLE BIRD.

By S. B. McManus.

The American Goldfinch is known in some localities as "Yellow Bird" and Thistle Bird. They are found all year in this State. In summer the males wear attractive colors—bright yellow, with top of head, wings and tail black. The females are duller. In winter both sexes are duller than the females in summer. They fly through the air with a galloping motion, repeating their call "Per-chic-o-ree" as they go. They frequent lettuce patches, hemp stalks and thistles when the seed is ripe.

In the clearin', where the thistle, an' poke an' fireweed,
Place their feet among the ashes and sow their harvest seed,
Ther' the little yeller thistle bird goes swingin' through the sky,
Like they's ridin' on the ocean when the waves were wavin' high.
An' they look like dandelion blows, got loose and given wings
An' a voice (made up ter me, it seems, of the finest fiddle strings);
An' they dance among the posies with the snarlin' bumble-bee,
Cuttin' up their shines an' capers, that make me laf to see.
An' there hain't a bird that's mean enough to tech the little mites,
An' I kinder think they're lookin' out ter see they get their rights.
They're like children in the clearin', playin they was married folks,
For they never seem in airnest, but air allers full o' jokes.

An' they look so outer place like, 'mong the stumps'n' burnin' logs,
With the hot wind whirlin' madly till your very breath it clogs,
I stop sometimes to watch them, an' they rest me like a cup
Uv water cool and sparklin' jest from the spring dipped up;
An' sometimes my gold-haired baby, with my dinner in a pail,
Comes to me an' I leave the wedge still stickin' in the rail,—
An' we set down clost together like es if we's only one,
An' we eat 'n' laf, 'n' visit till ther' isn't left a crum'.
Then she wanders 'round the clearin' jest as busy as I am,
An' my work seems twice as easy, 'n' I feel so stout 'n' calm.
An' the yeller birds fly near her, jest es if they knowed her too,
An' wor hankerin' fer her lovin' es I half suspect they do;
While I get the birds 'n' babies all kinked up in my heart,
Fer when they're nigh about me, I kent keep them quite apart.
But the yeller birds keep singin', an' my gal has wandered home,
An' I get my thoughts untangled, which, sometimes may like to roam.
They make me think of babies in a home wher' all the rest
Air old, 'n' gray, 'n' wrinkled, 'n' in ugly homespun drest,
Er a thought thet God made livin' when he blest the waitin' band
Of children, an' upon their heads he laid his lovin' hand.

BIRDS ON THE PICKET LINE.

By Lee O. Harris.

The first glad winds of the morning swept
  Over the crest of the mountain wood;
The first gray light of the dawn had crept
  Down where the blue-clad picket stood.
Across the hollow a man in grey
  Had watched, like him, all the long night through,
Intent to shed at the dawn of day
  A redder stain than the morning knew.

The morn shed life in her glowing path;
  The winds sang peace through the forest reach;
But the hearts below were hot with wrath,
  As cheeks were laid to the rifle's breech.
One lurking place was a vine-clad screen,
  The other, sweet with the roses' breath,
Yet hate crossed hate through the space between,
  And death looked into the face of death.

God pity us all this lust for blood—
  One moment more and the death had sped;
One little moment and God's green wood
  Had sepulchered war's uncoffined dead.
But ere from the deadly rifles rang
  The war-god's cry through the startled grove,
A bird sprang up from its nest and sang
  Its morning hymn to the God of love.

From tree and thicket an answering song,
  Another, another, till, near and far,
The message of love was borne along
  Above the hate and the wrath of war,
Then each man rose from his hidden lair,
  As one ashamed of a thing amiss,
And wrinkled foreheads grew smooth and fair,
  As when they leaned to a mother's kiss.

Two rifle-butts to the glad earth sank;
  Two faces glowed like the coming dawn;
Then: "How'r'you, Johnny?" and "How'd'ye, Yank?"
  The morning hymns of the birds rang on;
The soldiers listened intent and mute,
  Then, half in courtesy, half in shame,
Two hands were raised in a swift salute;
  Two foemen went by the way they came.

God pity us when the heart's unrest
  Can drag the soul in its captive train;
God pardon us all this wrath unblest,
  That brands the race with the mark of Cain.
But blest be the influence sent that day
  To soften hatred to gentle words,
Till war forgot he had come to stay,
  And bowed his crest to the woodland birds.

THE BIRDS AND THE HOURS.

I

4 a. m.

Who is the bird of the early dawn?
The brown capped Chippy, who from the lawn
Raises his wings and with rapture thrills,
While his simple ditty he softly trills.

5 a. m.

Who is the bird of the risen sun?
The Robin's chorus is wellnigh done
When Bobolink swings from the clover high,
And scatters his love notes across the sky.

9 a. m.

Who is the bird of the calm forenoon?
The Catbird gay with his jeering tune,
Who scolds and mimics and waves his wings
And jerks his tail as he wildly sings.

Noon.

Who is the bird of the middle day?
The green-winged, red-eyed Vireo gray,
Who talks and preaches, yet keeps an eye
On every stranger who passes by.

5 p. m.

Who is the bird of the afternoon?
The Wood Thrush, shy, with his silvery tune
Of flute and zither and flageolet;
His rippling song you will never forget.

THE BIRD'S ORCHESTRA.

By Celia Thaxter.

Bobolink shall play the violin,
Great applause to win;
Lowly, sweet and sad the meadow lark
Plays the oboe, Hark!
That inspired bugle with a soul—
'Tis the oriole;
Yellow-bird the clarionet shall play,
Blithe and clear, and gay.
Purple finch what instrument will suit?
He can play the flute.
Fire-winged blackbirds sound the merry fife,
Soldiers without strife;
And the robins wind the the mellow horn,
Loudly eve and morn.
Who shall clash the cymbals, jay and crow;
That is all they know.
Hylas twang their harps so weird and high,
Such a tuneful cry;
And to roll the deep, melodious drum,
Lo, the bullfrogs come!
Then the splendid chorus, who shall sing
Of so fine a thing?
Who the names of the performers call,
Truly one and all?
Bluebird, bunting, cat-bird, chickadee
(Phoebe bird is he).
Swallow, creeper, crossbill, cuckoo, dove,
Wee wren that I love;
Brisk fly-catcher, finches—what a crowd!
King bird whistling loud;
Sweet rose-breasted grosbeak, wren and thrush,

Hear these two and hush;
Scarlet tanager, song-sparrow small
(Dearer he than all;
At the first sound of his friendly voice,
Saddest hearts rejoice).
Redpoll, nuthatch, thrasher, plover gray—
Curlew, did I say?
What a jangling all the grakles make!
Is it some mistake?
Anvil chorus yellow hammers strike,
And the wicked shrike
Harshly creaks like some half-open door;
He can do no more.

HOW TO WATCH THE BIRDS.*

When you see a strange bird, try to note quickly a few of the things most necessary to naming him. Then you must try to answer the following questions:

How many inches long was he?

What was his general color?

Was his breast plain or speckled?

What was he doing, feeding on the ground or in a tree?

Did he walk with one foot after the other, or hop with both feet together?

Did he sing or only call?

At first you will remember only two or three of these questions, and they will probably be his size, colors, and song, if he happens to be singing at the time.

You may not think that a bird who is hopping about on the grass, or flirting about in the branches of a tree, is doing anything in particular. But really he may be either collecting material for his nest, or searching for some particular kind of food in a way which will tell you to what bird brootherhood he belongs.

. . . . . .

The male is the only real singer in birdland. Many females have pretty musical notes that they give when about the nest, and some scraps of song; one or two are good musicians, but the great chorus comes from the males. Birds sing best from the time they put on their spring coat until after the nesting season, when they moult it off, so that the nesting season is the best time to name the birds, for then their clothes are freshest and their songs the most distinctive.

Everything in the daily life of a bird is interesting. You will find that every bird has its regular times for bathing, pluming its feathers, eating, sleeping, working, and playing, all in its own way, just as you yourselves have. And everything he does is done cheerfully and promptly.

*Adopted from "Citizen Bird." By permission of the Macmillan Co.

THE BONNY BROWN QUAIL.

By Lee O. Harris, Greenfield, Ind.

The quail, known as "Bob White," from its well-known summer call, is found throughout the year all over our State.

The song, the song of the bonny brown quail!
My heart leaps up at the joyous sound.
When first the gleam of the morning pale
Steals slowly over the dewy ground;
Ere yet the maples along the hill
Are draped with fringes of sunlight gold,
I hear the notes of his piping shrill,
From hill, and valley, and field, and wold—
"'Tis light! 'Tis light!
Bob White! Bob White!"
Then up he springs to the topmost rail
And struts and sings in his proud delight
The song of the bonny brown quail.

Thus all day long in the tasseled corn,
And where the willowy waters flow,
In fields by the blade of the reaper shorn;
In copse, and dingle, and vale below;
Where star-crowned asters delight to stand,
And goldenrods, in their robes of state;
And in the furrows of fallow-land,
He calls aloud to his dusky mate:
"All right! All right!
Bob White! Bob White!"
And from her nook where the brambles trail,
She guides the course of her whirring flight
By the song of the bonny brown quail.

O, bonny bird, with the necklaced throat;
The song you sing is but brief and shrill,
And yet methinks there never was note
More sweetly tuned by a master's skill.
And like the song of a vanished day,
It fills my heart with a subtle joy,
Till, all forgetting my locks of gray,
I mock your whistle, again a boy.
"You're right! You're right!
Bob White! Bob White!"
The hair may whiten, the cheek may pale;
Time only mellows the old delight
In the song of the bonny brown quail.

When, gliding slowly from east to west,
The long black shadows begin to crawl;
Ere dew has wetted his speckled breast.
The brown quail whistles his loud recall:
"Come home! Come home!" the wind is still;
The light is playing along the sky;
The maples are nodding below the hill;
The world is sleepy and so am I.
"Good night! Good night!
Bob White! Bob White!"
The stars keep watch when the sunbeams fail,
And morn will waken the golden light,
And the song of the bonny brown quail.

A whirr of wings o'er the stubble brown;
A patter of feet below the hill;
A close brown circle, all nestled down—
"Bob White! Good night!" and all is still.
The rabbit passes with velvet tread,
And eyes of wonder that wink and peep;
The winds sing lullaby overhead,
And put the bonny brown quail to sleep.
"Good night! Good night!
Bob White! Bob White!"
Would I could hide in the dewy vale,
And bid the cares of the world good-night,
In song, like the bonny brown quail.

THE LITTLE BROWN WREN.

By Clinton Scollard.

There's a little brown wren that has built in our tree,
And she's scarcely as big as a big bumble-bee;
She has hollowed a house in the heart of a limb,
And made the walls tidy and made the floor trim
With the down of the crow's foot, with tow, and with straw,
The cosiest dwelling that ever you saw.

This little brown wren has the brightest of eyes,
And a foot of a very diminutive size;
Her tail is as trig as the sail of a ship;
She's demure, though she walks with a hop and a skip;
And her voice—but a flute were more fit than a pen
To tell of the voice of the little brown wren.

One morning Sir Sparrow came sauntering by,
And cast on the wren's house an envious eye;
With a strut of bravado and toss of his head,
"I'll put in my claim here," the bold fellow said;
So straightway he mounted on impudent wing,
And entered the door without pausing to ring.

An instant—and swiftly that feathery knight,
All towsled and tumbled, in terror took flight,
While there by the door on her favorite perch,
As neat as a lady just starting for church,
With this song on her lips, "He will not call again
Unless he is asked," said the little brown wren.

—From "A Boy's Book of Rhyme," by permission of Small, Maynard & Co., copyright, 1896, by Copeland & Day.

To the Teacher.—During the fall have the pupils prepare lists of the trees and birds native in your community. On Arbor and Bird Day, have these lists read, then make a complete list from the various reports presented by the pupils.

SOME POEMS SUITABLE FOR RECITATION AND STUDY.

The Robin ..... Celia Thaxter
The Song Sparrow ..... Celia Thaxter
The Blackbird ..... Alice Cary
On Seeing a Wild Bird ..... Alice Cary
To a Seabird ..... Bret Harte
The Swallow ..... Owen Meredith
A Bird at Sunset ..... Owen Meredith
The Titlark's Nest ..... Owen Meredith
What the Birds Said ..... Whittier
The Sandpiper ..... Celia Thaxter
The Falcon ..... Lowell
The Titmouse ..... R. W. Emerson
To a Waterfowl ..... Bryant
Robert of Lincoln ..... Bryant
The Return of the Birds ..... Bryant
The Eagle ..... Tennyson
To the Skylark ..... William Wordsworth
Sir Robin ..... Lucy Larcom
Story of a Blackbird ..... Alice Cary
The Birds of Killingworth ..... Longfellow
The Chickadee ..... Emerson
The Wood Pewee ..... Trowbridge
The Waterfowl ..... Bryant
The Humming Bird ..... Fawcett
The Oriole (in Under the Willows) ..... Lowell

4. Outline of Township Institute Work, 1902.

(READ THIS CAREFULLY.)

INTRODUCTION.

The law provides that the County Superintendent "shall hold one preliminary institute in each township in his county, before the opening of the schools each year, for the purpose of helping the teachers in the organization of their schools and giving any other needed assistance; but instead of holding such preliminary institute in each township, he may hold a joint institute for two or more adjoining school corporations."

The joint preliminary institute is recommended for the large counties in order that the County Superintendent may be able to attend all the meetings without unduly prolonging the work.

All duties for the preliminary institute should be assigned early by the County Superintendent, that the teachers may have sufficient time to make preparation.

It is recommended that the Trustee, with the advice and concurrence of the County Superintendent, appoint for the year an experienced and competent teacher to serve as Township Principal, whose duty it shall be to take entire charge of the institute work in the absence of the County Superintendent, serve as Chairman of the Program Committee, and carry out the instructions of the Superintendent and Trustee.

In preparing the following program, effort is made to follow as nearly as possible the plans of the old outlines. We believe that the Township Institute is one of the strongest features of our school system, and that radical changes would tend to weaken, rather than strengthen, the work.

The close relationship existing between the Township Institute system and the Teachers' Reading Circle has been helpful to both. We can not at this time conceive of a better plan to interest teachers and promote education among them than the careful reading

and discussion of good books. The two books adopted exclusively for the institute work are Systematic Methodology and Dickens as an Educator. The first book is strictly professional, having to do with problems of education and practice. It suggests many points which will arouse discussion and promote careful thinking. On the whole it is a book filled with the fundamentals of educational practice and wise suggestions for practical work. The second book combines the educational thoughts of Dickens with his literary expression, thus making it a book of rare value from the standpoints of both education and literature. A careful reading of it should promote interest in the author and his works and place teachers upon their guard against the pitfalls of the old English schoolmaster.

For the afternoon work the institute has the option of discussing subjects of general and special interest to the school community and teachers or one of two books adopted by the Reading Circle Board for the eighth and higher grades in accordance with the outlines on the following pages. It should be understood that the discussion of books other than the two regularly adopted for the teachers' circle is optional, and that others are outlined only that the institute may be provided with adequate material for successful institutes. In the event it is decided to use a third book teachers should decide between Side Lights on American History, Vol. II, and Greek Sculpture. These books are not expensive, though full of interesting and well written material for study and discussion. Many teachers will recall with pleasure the use of the first volume of Side Lights on American History two years ago. There was a sentiment almost unanimous that the book stimulated history teaching throughout the State, and presented many historical points in a new light.

Believing implicitly in the value of the Township Institute as an agency in the education of the teachers of the State, and in its power in the advancement of our educational system, we hope that every teacher in Indiana will enter into the spirit of the work with the determination to make the institute a success.

We sincerely hope that your work for the year may be pleasant and profitable. Very truly, FRANK L. JONES,

State Superintendent of Public Instruction.

June 1, 1902.

LAWS CONCERNING TOWNSHIP INSTITUTES AND TEACHERS' WAGES.

192. School Law. Township Institutes. At least one Saturday in each month during which the public schools may be in progress shall be devoted to township institutes, or model schools for the improvement of teachers; and two Saturdays may be appropriated, at the discretion of the Township Trustee of any township. Such institute shall be presided over by a teacher, or other person, designated by the Trustee of the township. The Township Trustee shall specify, in a written contract with each teacher, that such teacher shall attend the full session of each institute contemplated herein, or forfeit one day's wages for every day's absence therefrom, unless such absence shall be occasioned by sickness, or such other reason as may be approved by the Township Trustee, and for each day's attendance at such institute each teacher shall receive the same wages as for one day's teaching: Provided, That no teacher shall receive such wages unless he or she shall attend the full session of such institute and perform the duty or duties assigned.

Teachers' Wage Law: The daily wages of teachers for teaching in the public schools and attending county and township institutes shall not be less than an amount determined by multiplying two and one-half cents by the general average of scholarship and success given the teacher on his highest grade of license at the time of contracting: Provided, That only the general average of scholarship shall be used in determining the wages of beginning teachers.

FIRST INSTITUTE. (PRELIMINARY.)

(To be held before the opening of schools in the fall.)

PROGRAM.

9:00. (1) Opening Exercises.
(2) Roll-call and organization.
(3) Reading of Introduction to these outlines, pages 3 and 4, to determine the nature and scope of the work for the year. Note particularly the reference to optional work for the afternoon sessions.
(4) Systematic Methodology.
(a) Paper.
(b) General Discussion.
(c) Quiz, conducted by the leader or writer of the paper.
11:00. (5) Dickens as an Educator.
(a) Paper.
(b) General Discussion.
(c) Quiz.
12:00. NOON RECESS.

1:30. (6) Questions of Importance to the Teacher and Related to Organization. (Assign one topic to each teacher for informal discussion.)

(a) The keeping of a daily register.
(b) The items that must be reported to township trustee or school board at the end of the year.
(c) The teacher's relation to the compulsory education law.
(d) The importance of having an adequate supply of textbooks and appliances on the first day of school.
(e) The importance of beginning well, and of having the first day a good one in every respect.
(f) The teacher's contract.
(g) What does this township need most in educational organization and stimulation?
(h) Talks by County Superintendent and Township Trustee.

*2:30. (7) Side Lights on American History, Vol. II (optional) and Greek Sculpture (optional).

(a) The leader should read from the book all included in the first outline and comment as he thinks necessary.—Sidelights, Pages 1 to 46; Greek Sculpture. Read Introduction and Chapter I.
(b) Quiz.

3;30. (8) Assignments for the Second Institute.

SYSTEMATIC METHODOLOGY.

I. Study Carefully to Page 60.

1. Note, in the introduction, what to expect from the remainder of the book. Keep testing to see whether or not the author is consistent throughout.
2. In Chapter I, do you discover any variation from the old established "faculty psychology?"
3. In Chapter III, catch the spirit of the distinction between what may be called the "objective" and the "subjective" process of training sense perception. Wherever directions are given for the culture of a mental power, test them as to their rational order, provided they are related, and add any others that you can.
4. In Chapter IV, impress the meaning of retention, remember, forget, erasure.

   In considering the subjects of your curriculum, decide which ones, and which parts should be impressed upon the mechanical memory, and which upon the rational memory.
5. In Chapter V, distinguish clearly between a conserving and a producing faculty; show that the relations of material things to

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*See introduction to these outlines for note on "optional subjects." The teachers should decide by vote which of the two optional books, if either, they wish to read and discuss during the institute year, and use the outlines corresponding. These two books are on the Pupils' Reading List for eighth and higher grades. (See list on last page of this book.)

each other are as real as the things themselves; add any other means of avoiding or correcting the errors of imagination; and be prepared to defend your position on the question of the wisdom of allowing a person to "sow his wild oats" while he is young.

6. In Chapter VI, it will add clearness to read pages 97-104. Note that in this process of thought we pass for the first time in our treatment, out of the realm of mere "individuals" into that of "classes."

Discriminate accurately between inductive and deductive thinking, because this truth will be carried over to the distinction between inductive and deductive teaching.

DICKENS AS AN EDUCATOR.

(Pages 1-28.)

Chapter I.

Purposes of the book.
Dickens as an intentional educator.
Dickens and the kindergarten.
His attitude on the questions of child depravity, sympathy, a rich and real childhood, selfhood, polish, co-operation, joyousness, the normal school, the "new education."
Did he exaggerate defects?
Was he destructive rather than constructive?
Relation of Froebel and Dickens.

Chapter II.

Infant Gardens.
Froebel's youth. Influences.
Spirit of patriotism.
His method of improving society.
His first school.
Later work for kindergartens.
Basis of Froebel's teaching.
His method—the teacher—spontaneity—co-operation of mind and body—the mother—women as teachers—songs and games—the six "gifts."

See "Froebel's Pedagogics of the Kindergarten."—D. Appleton & Co.

SECOND INSTITUTE.

PROGRAM.

9:05. Opening Exercises and Roll-call.
(1) Systematic Methodology.
(a) Paper.
(b) General Discussion.
(c) Quiz by the Leader in Discussion.
10:30. (2) Dickens as an Educator.
(a) Paper.
(b) General Discussion.
(c) Quiz.

12:00. NOON RECESS.

1:30. (3) General Topics (assign each to a different teacher).

(a) What should be accomplished in Reading in the beginning class before the Christmas vacation?

(b) Should the Multiplication Tables be memorized in order, as in the earlier schools?

(c) Discuss the Pupils' Reading Circle. The books for the current year. How can we get them?

2:30. (4) Optional Subjects: Side Lights on American History, Vol. II, or Greek Sculpture.

3:30. (5) Assignment of work for Third Institute.

(1) SYSTEMATIC METHODOLOGY.

Study Pages 60-96.

1. In Chapter VII, learn at the outset that we are considering only a new phase of the same mental experiences as have thus far been under discussion. (See pages 17, 18.)

   Is it right to speak of "feelings in the body" and "feelings in the mind?" Just what is meant when we say, "my finger pains me?"

   If you desire an accurate distinction between the conscience and the moral judgment, moral consciousness, moral taste, etc., refer to Robinson's "Principles and Practice of Morality."

2. In Chapter VIII, get the exact meaning of will; distinguish between a person's "freedom" and his "free will;" note how "freedom" is inseparably connected with law.

   Test the scheme recommended for measuring the success of school work, and for correcting "self-will" or stubbornness.

3. In Chapter IX, test very thoroughly the treatment of "non-voluntary attention." What do you think of the claim that "what is found in the child, as a natural endowment, should be cultivated?"

   What is the exact point of value in the proposed remedy for mind wandering?

   Is not teaching good, if it holds the undivided attention of a class?

(2) DICKENS AS AN EDUCATOR.

(Pages 29-86.)

Discuss school tyranny, cruelty and punishment as shown in the character of Squeers. Its overthrow in Smike.

Sincere but mistaken authority in Bumble.

Christian philanthropy in the gentleman in the white waistcoat.

Degredation of childhood in Mr. Creakle.

Repressive religious tyranny in Mr. Murdstone.

Disrespect for feelings and opinions of children in John Willet.

Abuse as cure for weak-mindedness in Barnaby Rudge.

Infallibility in Mr. Podsnap.

Coercion in Arthur Clennam.

Want of sympathy in Mrs. Gargery.

Explain the prevailing error in the methods of Dr. Blimber, Mrs. Pipchin, the Grinders, Mr. Gradgrind, Mr. Honeythunder.
According to Dickens, what is the final result of all coercive discipline?
What is meant by schools having "free republics of childhood?"
Harmonize law and liberty.
Contrast coercive punishment and revelation of natural laws.
How are corporal punishment and character related?
Point out specific applications of child activity in Froebel's method.—Pedagogics of the Kindergarten, pages 286-377.

(3) SIDE LIGHTS ON AMERICAN HISTORY.

(Pages 47-94.)

1. Great Leaders in Congress During the War.
   (a) Is it true that we do not have as great leaders to-day as in the past? Page 47.
   (b) Relative strength in North and South in great leaders in statecraft during the war.
   (c) How did the House compare with the Senate in great men? Is the same true today?
   (d) Each teacher should learn well the leaders, and their views, of this great period.
2. Events Leading to the War.
   (a) Begin with the constitutional convention and point out all of the movements to 1860 which remotely or immediately brought on the war. List these on the blackboard and discuss fully.
   (b) What immediate acts brought on the war?
   (c) Discuss the sincerity of the North. The South.
   (d) Discuss fully the Kansas-Nebraska Bill. Dred Scott Decision.

(4) GREEK SCULPTURE.

(Pages 7-18.)

1. Athena Giustiniana. (See Pronouncing Vocabulary in back of book.)
   (a) Who was she?
   (b) Other names.
   (c) Description.
   (d) Why was the owl her symbolic bird?
   (e) Relation to the Trojan war.
   (f) Relate the story of Athena's guidance of Ulysses to Ithaca. (See any story of the Trojan war.)
   (g) Study the picture on page 9.
   (h) Study a good work on Mythology for supplementary material.
2. Horsemen from the Parthenon Frieze.
   (a) Athenian worship.
   (b) Festivals, gymnastics, music, races, feasts, dances, sacrifices.
   (c) Careful description of the Parthenon. (See Encyclopædia.)
   (d) A description of the Parthenon Frieze proper.
   (e) Careful study of the picture on page 15.

Note.—Best results may be had by reading the subject matter together in the Institute. Let each teacher bring his book to the meeting and follow

carefully the reading by the leader; then have the leader enter into a fuller discussion, giving related points from his wider reading and research. Follow this with a quiz. Teachers will be able to interest their pupils in much of the material of the little volume, Greek Sculpture, and should reproduce the material in simple story and accompany the same with an interest in the pictures. Why should not all pupils know Zeus, Athena, Juno, Apollo, Venus de Milo, Orpheus and Eurydice?

THIRD INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll-call.
- (1) Systematic Methodology.
  - (a) Paper.
  - (b) Discussion.
  - (c) Quiz.

10:30. (2) Dickens as an Educator.
- (a) Paper.
- (b) Discussion.
- (c) Quiz.

12:00. NOON RECESS.

1:30. (3) General Topics.
- (a) How should the young pupil's language be corrected?
- (b) Formulate a suitable program for the last one-fourth day previous to Thanksgiving Day.
- (c) What should be the nature of opening exercises for the district schools?

2:30. (4) Optional subjects: Side Lights on American History, Vol. II, or Greek Sculpture.

3:30. (5) Assignment of work for Fourth Institute.

(1) SYSTEMATIC METHODOLOGY.

Study pages 97-143.

1. Note clearly that in forming both "individual notions" and "general notions" we have to do with individual things. What are "things?" What is the difference in their treatment in the effort at forming the two kinds of notions?

   (If this chapter seems difficult, remember that it is important. It will be impossible to comprehend the underlying philosophy of teaching unless the above types of notions are comprehended.)

2. Distinguish carefully the four methods of teaching, and be especially careful not to confuse the members of each pair of similars—induction and synthesis, and deduction and analysis.

   Note the extension of the philosophy into the realm of "judgments."

   What reason can you give for beginning our study of realities with the individuals?

   If you do not agree with the author's classification (page 131), make one for yourself and prepare to defend it.

(2) DICKENS AS AN EDUCATOR.

(Pages 87-135.)

Chapter IV.

What is the relation of the theory of corporal punishment to the doctrine of child depravity?

What effect had the preaching of depravity on the character of Pip in Great Expectations? On Abel Magwitch?

Explain the child's activity both in the light of the schoolmaster of Dickens' time, and in the light of modern educational methods.

What was Froebel's view of the doctrine of child depravity, and his explanation of the manifestation of evil? See Froebel's "Education of Man," pages 94-127. D. Appleton & Co.

Chapter V.

What pedagogical evil is characterized in Dombey and Son?

Discuss causes, results and remedies as suggested by the Blimber's school.

What is Dr. Harris's explanation of arrested development as exemplified in formal arithmetic work?

What arguments are made against examinations? Can you answer them?

Study Froebel's idea of the relation of facts and principles.—Education of Man, pages 128-139.

Chapter VI.

What was Dickens' attitude toward free childhood?

Discuss this attitude as shown in Nicholas Nickelby, Martin Chuzzlewit, Dombey and Son, Bleak House, and Hard Times.

Distinguish between guiding control and domination.

Chapter VII.

Discuss the evils arising from contempt of individuality as portrayed in Bleak House, Little Dorrit, and Our Mutual Friend.

Contrast the schools of Mr. Gradgrind and Dr. Strong on the basis of individuality.

(3) SIDE LIGHTS ON AMERICAN HISTORY, VOL. II.

(Pages 95-147.)

1. The Battle of Gettysburg.
   (a) Select the best reader among the teachers to read the account of this battle to the Institute. Examine from time to time the map on page 79. Every teacher in Indiana should read this description of the famous battle to his school. A careful study of a single battle will greatly stimulate the history work, and impress the pupils with the valor, sacrifice and patriotism of our American soldiers.
   (b) With appropriate drawings, the leader should show on the blackboard all of the important movements of the two armies and their relative positions each day of the great battle.
2. Causes of Northern Success.
   (a) Was the victory to the strong? Compare.
   (b) Influence of manufacturer.

(c) Was slavery a weakness or strength to the South during hostilities?
(d) The blockade. Its effects very carefully stated.
(e) The personality of Lincoln as an element of strength.
(f) The Border States. Why did they not secede?. Their influence in the war.
(g) Finances of North and South. Credit of each section.
(h) Foreign relations.
(i) The effectiveness of the Emancipation Proclamation as an element of Northern success.

(4) GREEK SCULPTURE.

Chapters IV, V, VI.

1. See "note" as to procedure in outline for Second Institute.
2. The leader should look up supplementary references and bring inspiration and new light to these studies.
3. A careful quiz will fix in the mind much of this material.

FOURTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll-call.
(1) Systematic Methodology.
(a) Paper.
(b) General Discussion.
(c) Quiz.
10:30. (2) Dickens as an Educator.
(a) Paper.
(b) General Discussion.
(c) Quiz.
12:00. NOON RECESS.
1:30. (3) General Topics:
(a) Should Language and Grammar be taught as arts or as sciences in the grades? Discuss fully. How do our State texts consider the subject?—arts or sciences? Give reasons.
(b) What subjects may be eliminated from Arithmetic? How about Cube Root? Allegation? Partial Payments?
(c) Should teachers have definite plans and courses of work providing that pupils shall memorize certain poems or selections during the year? Make an outline of minimum requirements, giving selections desirable to be memorized in each grade.
2:30. (4) Optional subjects: Side Lights on American History, Vol. II, or Greek Sculpture.
3:30. (5) Assignment of work for Fifth Institute.

(1) SYSTEMATIC METHODOLOGY.

Study Pages 144-173. Follow this with a careful reading of the whole of Part II.

(Note that this chapter gives a rather cursory survey of only two points connected with many branches of the curriculum. An understanding of these two points, however, will do much toward opening the way to a full understanding of the pedagogy of the branches.)

Is it more important to determine the "unit of study" in some branches than in others? Why?

Let the discussion focus upon the correctness and value of pages 146, 147.

(2) DICKENS AS AN EDUCATOR.

(Pages 136-180.)

Chapter VIII.

What is the Herbartian psychology as to the relation of knowledge to the soul?

Explain Dickens' attempt to refute this psychology in Hard Times.

What was the prevailing error in the school of Gradgrind?

What is Froebel's philosophy of the educational value of the imagination?

Explain A Child's Dream of a Star from an educational view.

Point out and discuss the advantages of Jemmy Jackman Jirriper's educational training.

Chapter IX.

Distinguish between sympathy for children and sympathy with children.

Depict sympathy with children as illustrated in Nicholas Nickleby, Oliver Twist, Old Curiosity Shop, Dombey and Son, Bleak House.

Tell briefly the story of these children to show their claim on the readers' sympathy: The Jellybys, Poor Jo, the Pardiggles, Phil Squod, Smike, Pip.

What inspiration for teachers is there in the life of Laura Bridgman?

What is the philosophy of sympathy as revealed by Froebel?

(3) SIDE LIGHTS OF AMERICAN HISTORY, VOL. II.

(Pages 148-214.)

1. Reconstruction:
   - (a) What was the problem of Reconstruction?
   - (b) What does the Constitution say about taking up arms against one's country?
   - (c) What was the theory of the South about the federation or union of the States as covered by the National Constitution?
   - (d) How does the doctrine of State's Rights differ from the doctrine of State Sovereignty?
   - (e) Enumerate with great care the contentions of both North and South as sections in the matter of the relation of our national government to the various States.

2. Lincoln's Attitude Toward Reconstruction.
   (a) How did it vary from the view of Congress?
   (b) Why was Lincoln not the proper man to handle the question of Reconstruction?
3. Johnson v. Congress.
   (a) The issues.
   (b) Impeachment.
   (c) Trial.
4. Show Fully How Reconstruction Was Finally Brought About. Give all of the steps.
5. Carpetbaggers and Scalawags.
6. The Race Problem As It Affected Reconstruction.

(4) GREEK SCULPTURE.

(a) See outline for Third Institute for suggestions.
(b) The leader should consider the Institute a school and show just how he would present certain importants points in this book to his pupils.

FIFTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll-call.
   (1) Systematic Methodology.
      (a) Paper.
      (b) General Discussion.
      (c) Quiz.
10:30. (2) Dickens as an Educator.
      (a) Paper.
      (b) General Discussion.
      (c) Quiz.
12:00. NOON RECESS.
1:30. (3) General Topics.
      (a) Is it possible for all pupils of a given grade to learn to spell all of the words outlined for that grade, in the spelling-book now in use in Indiana? Should the proper spelling of all these words be the condition of promotion?
      (b) Would it be helpful to the schools to drop one of the text-books in physiology and substitute a suitable primary history; in other words, would a two-book series in history be more helpful than a two-book series in physiology?
      (c) How can common school graduates be encouraged to go to high school?
2:30. (4) Optional subjects: Side Lights on American History, Vol. II, or Greek Sculpture.
3:30. (5) Assignment of work for the Sixth Institute.

(1) SYSTEMATIC METHODOLOGY.

Study Pages 174-254.

1. Examine into the truth of the first paragraph, page 177. Either satisfy yourself that it is true, or else find the error.

   If the method, treated in detail on page 188, is not acceptable to you, you should strive to find the error in the philosophy of Part II. Note the requirements of a complete Word Method of Teaching Reading (pages 188-194), because misrepresentations, along this line, are very common.

   In Advanced Reading be sure to get the spirit of the distinction on page 200, second paragraph.

   Compare this with Clark's "How to Teach Reading in the Public Schools."

2. After getting the purpose of the Language Lesson, consider carefully the "Scope of the Work" (pages 216-223), and observe how the work of the Language Lesson merges into that of the Rhetoric Class.

3. In the formal Grammar class, we aim at a different end, appeal to to other faculties, and the teacher presents to the child a very different mental attitude from that assumed in the Language Lesson.

   Do you accept as true all the statements made under "Analysis" and "Parsing?" If not, show their error.

(2) DICKENS AS AN EDUCATOR.

(Pages 181-234.)

Chapter X.

What evidence is there that Dickens believed in the importance of child study?

Point out his theory as exemplified in Jane Murdstone, Mr. Dombey, Solomon Gills, Richard Carstone.

Chapter XI.

Point out the evil training in the boyhood of Oliver Twist.

Justify the character of Jonas Chuzzlewit from your knowledge of his early training.

Discuss the characteristics of Mrs. Pipchin that unfit her for a teacher, and the evils in her "system" of training.

Show the character of Uriah Heep as a result of early training.

Trace the development of Steerforth's life from a mother's mistaken ideas of training.

Work out the proper relation of parents to children as antitheses suggested by the mistakes of Mrs. Jellyby, Mrs. Pardiggle, Mr. Turveydrop, Mrs. General, Mrs. Gargery, Mrs. Pocket.

Discuss Froebel's "School and Family."—Education of Man, pages 230-238.

Chapter XII.

Contrast the Toodle and Dombey families.

Froebel on Play.—Education of Man, pages 54-60.

The conditions of good training in Dr. Strong's school.

1.....
2.....
3.....
4.....
5.....
6.....

Harmonize these best methods with Froebel's educational principles.—Education by Development, pages 161-214.

Froebel's plea for co-operative management.

Discuss the best features in the methods of Betsy Trotwood, Mr. George, Mr. Pocket and the Major.

(3) SIDE LIGHTS OF AMERICAN HISTORY, VOL. II.

(Pages 215-259.)

1. The Alabama Claims.
   - (a) Complete history of the affair.
   - (b) Fight between Alabama and Kearsarge.
   - (c) Diplomatic questions involved.
   - (d) Negotiations.
   - (e) The attempt to make new international rules concerning naval operations in time of war. Pages 225-226.
   - (f) The Treaty of Washington.
   - (g) The Geneva Conference.
2. The Liberal Republican Movement of 1872.
   - (a) Dissatisfaction with the Republican party. Why?
   - (b) The Cincinnati Convention.
   - (c) Agreement between Liberal Republicans and Democrats.
   - (d) Horace Greeley.
   - (e) The campaign and results.

(4) GREEK SCULPTURE.

Chapters X, XI, XII.

(a) See suggestions in previous outlines.

SIXTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll-call.

(1) Systematic Methodology.

- (a) Paper.
- (b) General Discussion.
- (c) Quiz.

10:30. (2) Dickens as an Educator.

- (a) Paper.
- (b) General Discussion.
- (c) Quiz.

12:00. NOON RECESS.

1:30. (3) General Topics.

(a) Paper: The Pedagogy of Froebel.

(b) Paper: The Pedagogy of Pestalozzi.

Note.—Material for these papers may be found in any good library.

2:30. (4) Optional subjects: Side Lights on American History, Vol. II, or Greek Sculpture.

3:30. (5) Assignment of subjects for Seventh Institute.

(1) SYSTEMATIC METHODOLOGY.

Study Pages 255-291.

1. If you subscribe to the "Plans for Studying Spelling," how will you determine who are "eye-minded" and who are "ear-minded," and thus be able to advise? Are there enough decided cases to make much difference?
2. Is the distinction between "biography" and "history" a fair one?
   Interpret: "In history everything depends upon turning narrative into problems." Apply your knowledge of it by making a set of "historic problems."
3. How early in the school course should we begin to present "Literature" to the child? By what means should it be done?
   When the critical stage is reached, what is the first step to be taken? The second? Third? Etc. What is literary criticism?

(2) DICKENS AS AN EDUCATOR.

(Pages 235-284.)

Chapter XIII.

Make a careful study of Dickens' Sociology. .

Note suggestions and illustrations on seclusion—sorrow lifts in helping others—sham society—one's usefulness to others—democratic childhood —employer and employe.

Chapter XIV.

Relation of dirt to work.

The system of baby farming.

The diet of an apprentice.

Children's food.

The proverbial American haste at meals.

Froebel on children's food.—Education of Man.

Chapter XV.

Point out the evils in the following schools and discuss the proper methods which they are intended to suggest:

Minerva Hall.

Mrs. Walker's school.

Mrs. Wackles' school.

Miss Monflathers' school.

The Grinders' school.

The school Esther attended.

Mr. Cripple's academy.

Mr. Wopsle's great-aunt's school.

The school in Our Mutual Friend.
The Peecher-Headstone school.
Mrs. Lemon's school.
The Nuns' House.

Study the best features in the schools of Mr. Marton, Miss Donny, Phoebe.

In portraying these schools what principles set forth by Froebel may Dickens have had in mind?—Education of Man, pages 1-40.

(3) SIDE LIGHTS OF AMERICAN HISTORY, VOL. II.

(Pages 260-323.)

1. The Disputed Presidential Election of 1876.
   (a) Give careful account of previous failures of the electoral college to elect a President.
   (b) Why could not the electoral college elect in 1876?
   (c) The two candidates.
   (d) Issues of the campaign. Discuss fully.
   (e) The returnings boards.
   (f) The electoral commission.
2. The Garfield Tragedy.
   (a) The Blaine-Conkling feud.
   (b) Its relation to party success and failure.
3. The Third Term Movement.
4. The Chicago Convention.
5. Garfield's Nomination.
6. The Campaign Resulting in Garfield's Election.
7. The Influence of Blaine on Garfield.
8. The Break with Conkling and Platt.
9. Garfield's Assassination.

(4) GREEK SCULPTURE.

Chapters XIII and XIV.

(1) See previous outlines for suggestions.

SEVENTH INSTITUTE.

PROGRAM.

9:00. Opening Exercises and Roll-call.
   (1) Systematic Methodology.
      (a) Paper.
      (b) General Discussion.
      (c) Quiz.

10:30. (2) Dickens as an Educator.
      (a) Paper.
      (b) General Discussion.
      (c) Quiz.

12:00. NOON RECESS.
1:30. (3) General Topics.
(a) Paper: Horace Mann.
(b) General Discussion.
2:30. (4) Optional subjects: Side Lights on American History, Vol. 11, or Greek Sculpture.
3:30. (5) Adjournment.

(1) SYSTEMATIC METHODOLOGY.

Study Pages 292-361.

1. In Chapter XIX, if the author's technical terms are unfamiliar or are used in a different sense from that which is familiar to you, strive to get the author's meaning. With this done, compare his teaching (rather than just his words) with that of the late writers upon Geography.

   Familiarize yourself with the argument on pages 306-312. How does the plan which follows compare with your practice or observation?
2. In connection with Chapter XX, read Hodge's "Nature Study and Life."
3. In Chapter XXI, note that the first hint of a "graded series of lessons" is given on page 331. Up to that, the effort is made to get the teacher's mind ready for the task of teaching number.

   Enumerate all the reasons you can for the "three main divisions" into which the course in number is divided.

   Why does each "line" in our multiplication table extend to 12, and the entire table to 12x12?

   Is the method here presented in harmony with the "Grube method" of teaching number, or opposed to it?

(2) DICKENS AS AN EDUCATOR.

(Pages 285-319.)

Chapter XVI.

Apperception illustrated in Paul Dombey, Neville Landless, Poor Jo, George Silverman.

Apperceptive centers of city and country boys illustrated in Phil Squod and Mr. George. See also "School and Home Education," March, 1900.

Precepts and morality shown in Mr. Pecksniff.

Spirit of improvement, in Tellson's bank.

Nature and child development, in Child's Dream and Oliver Twist. See also "Education of Man," pages 160-166.

Play and exercise, in Mr. Marton, Mrs. Crupp, Paul and Tom Pinch. See also "Pedagogics of Kindergarten," pages 63-69.

Reading, in Jemmy Lirriper and David Copperfield. Compare "How Lina learned to read."—"Pedagogics of Kindergarten," pages 286-337.

Respect, in Tom Pinch.

Democracy of Education, Dedlock, Dombey and Bill Sikes.

Chapter XVII.

Discuss in general, Dickens' attitude toward the poor and unfortunate.

Point out the lesson in the training of neglected children shown in the following characters: Alice Marwood, Charley Neckett, Poor Jo, the Bigwigs, Mr. Creakle, Mr. Dick, Dr. Marigold.

Study the training of Sophy, Laura Bridgman and Helen Keller.

(3) SIDE LIGHTS ON AMERICAN HISTORY.

(Pages 324-401.)

1. Tariff Legislation.
   - (a) General Observations.
   - (b) First American Tariffs.
   - (c) The "Tariff of Abominations."
   - (d) Tariffs before the Civil War.
   - (e) Later Tariff Legislation.
2. The Spanish War.
   - (a) The Cuban Revolt.
   - (b) Causes of the War.
   - (c) Have the best reader among the teachers read to the Institute the accounts of Manila, Santiago and San Juan. Each teacher should read these to his school without fail.
   - (d) Puerto Rico.
   - (e) Peace Terms.
3. Modern Problems.

(4) GREEK SCULPTURE.

Chapters XV and XVI.

(a) See previous outlines for suggestions.

5. A Course in Nature Study for the Common Schools of Indiana, 1901.

INTRODUCTORY.

Within the last decade large and important strides have been made in the differentiation, organization and correlation of the subject-matter of the various subjects of study in the common school curriculum. This progress is not the result of agitation on the part of specialists in the different common school subjects so much as it is the effect of a recently acquired larger view of the nature of the child. In the light of this larger insight into child nature, students of applied pedagogy in the leading colleges and universities and supervisors of instruction everywhere have gradually seen the necessity of effecting such readjustments as have come and will yet come about, until the spirit of the New Education transforms the entire organization of the school and renders it such as will most economically promote the natural and logical evolution of child life.

Until comparatively recent times our elementary schools confined their work to the humanities and to such formal and expressive work as could be based upon them. Everything centered about man, as the universe was once supposed to center about the earth; but the better understanding of the child's potential powers and the principles underlying their development have resulted in a movement to bring the nature studies, which until recently have been taught exclusively in the universtities, colleges and high schools, into the elementary schools. Indeed, the question is no longer whether the nature studies shall be taught, but rather, it is, "Why stop the child's study of nature when he enters school?"

Nature Study is so new in American schools that it is still in the experimental stage, yet it has come to remain and to infuse a new

life and meaning into both the formal and content studies. The schools of Indiana have been a storm-center for the discovery and dissemination of truth concerning Nature Study, and they have contributed largely in bringing the experiment to its present stage of advancement. During the past four years our Superintendents' Association has sought to discover the scope and value of Nature Study, and this is its third report on the subject. As the experience of recent years in the teaching of Nature Study has been in schools covering a wide area and representing a great variety of conditions, it has aided greatly in the solution of the problems of determining the scope and possibilities of the subject, and of arranging its subject-matter in a working scheme adapted to the conditions and ends of public school education.

SCOPE.

The truth of first importance in Nature Study pertains to the scope of the subject. It is a subject with a definite organizing principle, not simply a number of facts or topics culled from high school science and presented in elementary language by methods correspondingly simple. Neither is it a vehicle for carrying information bearing upon an almost endless variety of natural phenomena treated promiscuously as they present themselves. Nature Study is the study of our physical environment in its normal, developing condition by direct, personal investigation. This environment is to be viewed as affecting itself and man, and as affected by man. It is not to be inferred that every fact or detail of our physical environment should be studied in any school nor that the same phenomena should be studied in every school.

LIMITATIONS.

A clear perception of the scope of Nature Study necessarily reveals the limitations of the subject, also. Nature Study does not contain the possibilities of a complete education, if education is the harmonious development of the complete powers of the human being, since no part of a thing, however large, can possibly equal the whole.

While Nature Study affords the child opportunity to adapt himself, in part, to his environment of nature, yet it provides for no

adequate study of the experiences and examples of the past. Nor does it develop directly those principles of conduct and social relationship which can be gained most readily and effectively from the study of human experiences and human examples and from an analysis of the institutions of civilized man. The largest and deepest insight into nature itself can not be attained until man as such and man as objectified in literature, art and the institutions of society are understood, for man and his products are largely the result of the ceaseless interaction between man's original gifts and nature. Conversely, insight into nature is essential to the fullest appreciation of man's spiritual life and its products. Not only does Nature Study not comprehend the whole field embraced by the content studies, but it provides no formal work such as is supplied in reading, writing, spelling, drawing, modeling, music, etc.

SCHOOL'S NEED OF NATURE STUDY.

The larger view of child life that has resulted from modern child study agrees with the historico-evolutionary theory of man's development, the experience of teachers and common sense in the thought that Nature Study is essential to the symmetrical development of the child's powers. Unless this thought is correct, Nature Study has no place in the school curriculum. The children's interests, dependent on their inherited impulses, necessitate the exercise of their powers, at the proper time, through experiences similar to those that brought growth to their ancestors. The child can not develop in accordance with his nature, unless he is confronted with struggles, problems and difficulties similar to those which confronted his ancestors and developed traits in them which he now possesses through inheritance.

The first great step of our ancestors in subduing their physical environment was the cultivation of the soil and the domestication of animals and plants. God's first directions to man pointed out this step in these words: "Be fruitful and multiply, and replenish the earth and subdue it; and have dominion over the fish of the sea, and over the fowl of the air and over every living thing that moveth upon the earth. * * * To you it shall be for meat." The conquest is not yet complete. Nature Study seeks to so train our children as that they, too, shall contribute to this great conquest and in so doing realize at least one of their impulses.

The demands for a more accurate adaptation of man to his natural environment are increasing with the advancing years. He does not now appreciate as he should, even for his own good alone, the relation of his natural environment to his success or failure, and consequently he does not possess the necessary basis for an intelligent response to the effect of this environment upon him. He does not recognize what things are helpful and what harmful, therefore he can not intelligently help or combat them. Nature Study seeks to enlarge this adaptation and to provide, at the same time, for sufficient exercise of the active, self-directive, participative nature of the child. In proportion as education, in response to the child's impulse to act and create, provides for the activity of the child instead of so much didactics on the part of the teacher must Nature Study become prominent in the schools.

PURPOSE.

Simultaneously with the determination of the subject-matter of Nature Study, the question as to the purpose, end or aim of the subject arises. Too much importance can not be attached to the value of a clear perception of the purpose of Nature Study, for this is the "backbone" of the subject, as it is of all education and life itself. In light of the purpose must every detail of the subject be ordered. No intelligent selection and arrangement of the materials for a course in this or any other subject is possible except we have the purpose clearly before us at every step.

The purpose of Nature Study is in harmony with the general aim of all education; namely, the development of a character with the ability and purpose to do good and with the power to create happiness. Dr. C. F. Hodge in "Nature Study and Life" says the purpose in Nature Study is, "Learning those things in nature that are best worth knowing, to the end of doing those things that make life most worth living."

MEANS AND ENDS.

In the accomplishment of its largest purpose Nature Study is both a means and an end. As a means it infuses new life and meaning into the other work of the school, modifies the school relationships in a helpful way and contributes largely to the child's appre-

ciation of what he receives from nature and prompts him both to recognize and pay the debt he owes her.

INTELLECTUAL.

Nature Study affords mental training especially in quickness and accuracy of perception, reason and judgment. However, Dr. Hodge in "Foundations of Nature Study," Pedagogical Seminary, has well said: "Observing and training the powers of observation are important things, but their value depends upon the worth-whileness of the whole process, including the object and purpose of the observation." His remark applies with equal force to the training which the other mental powers receive in Nature Study. The motive of the child in acquiring this "worth-while knowledge" renders the disciplinary value much greater than it would be were the motive less. This contribution alone justifies giving Nature Study a place in the curriculum.

ÆSTHETIC.

Nature Study also contributes to the development of the æsthetic element in the child's nature. The constant contemplation of such beauty of form and color as is found in nature and of the higher beauty of adaptation and unity in nature can not fail to develop an abiding love and appreciation of the beautiful wherever it is manifest. The largest æsthetic culture in Nature Study, however, should come from the creation of the beautiful in nature, not from passive enjoyment of nature's beauties as they exist. Looking at nature through the work of our great painters and poets will double the æsthetic culture nature should afford us. The poet will help the child to see beauty in the rose and yet leave it on the bush. What added grace, beauty and dignity the cornfields take on, if one knows Whittier's "Corn Song" or Longfellow's "Blessing the Cornfields." How much more beauty the commonest things assume while reading "To a Waterfowl," "The Visions of Sir Launfal," "The Chambered Nautilus," or Tennyson's "Brook."

ETHICAL.

Nature Study affords an almost ideal opportunity to aid in the formation of habits of truth-seeing and truth-telling, for every conclusion reached is based upon the child's own observations, if the work is properly done. Nature Study affords even greater ethical training, perhaps, in influencing the children to perform acts of positive good, rather than to allow them to continue to do harm innocently. An active, vigorous mind will find something to do; some way of expressing itself. Whether a person does good or evil depends largely on a "love of the right and hatred of the wrong." Much evil and wrong is done to things in nature through pure ignorance. A boy can not know how much harm he is doing in killing birds until he has been taught the good they are capable of doing, nor has he any intellectual basis for appreciating how much pain and distress he may be causing the lower animals when he cripples or kills them or breaks up their homes and natural haunts, until he comes to know them intimately. No one can estimate the damage he does in breeding "noxious insects or weeds or the fungi of plant or human diseases about his premises." To do our plain, common duty by ourselves and our neighbors "we need a large body of knowledge of the common things that surround the home." Knowledge of the common things about us is an essential basis of right living, and no better method of supplying it exists than that of establishing the proper kind of Nature Study courses throughout the common schools. Obedience to laws pertaining to the destruction of weeds, the purification of streams, and the protection of game during certain periods of the year need not be expected until the facts upon which they are based become the common property of the community. When the schools modify their courses of instructions so that they become positive agents for good, less of the "dull machinery of repression" will be needed both inside and outside of the school.

Hodge says: "Just in the period of early childhood, with its passion for activity and its capacity for interests, we need this ethical training more than at any other time. To turn the stream into beneficent channels is far better than to let it run to waste or to dam it up. If the boys of a neighborhood make the raising of peaches and grapes impossible, a better remedy than the jail consists in set-

ting them to raising peaches and grapes of their own. Effort for the production of property is ethical, and the moment the child engages in it, he places himself upon the side of law and order in the community. To rear a flower is an ideally ethical thing and may elevate the moral and æsthetic tone of a household. We need this ethical training, not in the way of moralizing, but in an unconscious positive doing as the warp of our education; and Nature Study offers boundless opportunities for its daily inculcation and practice."

The pupil, probably, does not begin to realize the greatest ethical value from his Nature Study until he enters the stage of self-direction during the adolescent period. It is then that the principles developed in Nature Study begin to translate themselves into a fundamental code of ethics in light of which the individual will be enabled rationally to determine the details of his conduct. The danger that confronts the adolescent if he comes to this period without a body of foundation principles upon which to base his conduct and out of which to carve his future career is great, indeed, even though great care and patience have developed an automatic tendency to right conduct. Even a well-developed, well-knit soul-texture and will-plexus must be able to appreciate the rationale of its automatic tendency to right conduct when the "storm and stress period" of life is reached.

RELIGIOUS.

Since creative effort for good is the fundamental requisite of religious progess, Nature Study is rich in its spiritual or religious possibilities. The realization of the highest aims of Nature Study demands that the child shall aid nature in its struggle toward perfection in all possible ways. In the language of Dr. Hodge, "The child that puts forth creative effort to make the world better; the child that plants a seed or cares for the life of an animal is working hand in hand with nature and the Creator, and what higher religious development can we desire than that he becomes 'the reflected image of God?' "

EXPRESSIVE WORK.

It was noted above that Nature Study is a valuable means of infusing new life and meaning into the other work of the school. It does this by supplying a broader apperceptive basis for the interpretation of man's spiritual life and its products and by supplying clear impressions which constitute a basis for the school's expressive work, especially in the lower grades. This statement does not in any sense minimize the contributions of history and literature as a basis for expressive work in the more advanced grades. The very nature of true expression presupposes organized thought or activity, which the school designs to furnish the child through the content studies and the social experiences of the school. The more interesting and valuable the content is upon which expression is based, the easier and quicker will the mastery of the formal work be rendered.

LANGUAGE.

The relation of Nature Study to each of the expressive studies depends, in part, on the nature of the study in question. Nature Study is of greatest value to the composition phase of language. As composing consists in arranging and expressing, in oral or written language, thoughts, feelings and volitions under impulse and for a purpose, it implies a "burning interest" in something on the part of the composer before a "worth-while product" is possible. Composition is the highest, broadest, and most universal form of expression. It is the only means of expressing accurately and adequately life, action, function and the higher spiritual meaning of things. Drawing or painting conveys only the visual or sensuous phases of nature, while Nature Study sees not only nature as it impinges upon the retina; but it sees, in addition, the meaning and spiritual significance back of nature's form.

This deeper meaning in nature should inspire the child to rise above his prosaic self, as it at once supplies both prerequisites, impulse and purpose. Nature Study is naturally adapted to render easy the phase of the composing process in which the ideas to be expressed are being arranged in order. Unless the arrangement of the ideas is peculiar to each individual, the work is mere perfunc-

tory imitation. Nature Study insures individuality as each child much reach his own conclusions from a first-hand examination of nature-material. This method of gaining ideas also insures clearness, which comprehends truthfulness and sequence. Truth and order are inherent in nature's processes; e. g., the tomato worm always passes through certain stages of growth in an unvarying order during its life history. The same statement is true of any organism in nature. The following suggestive plan may be employed in basing composition upon nature-material: (1) Observational work by children, which must be dynamic, therefore involving the sequence. (2) The crystallization of the results of such observations in a composition. If the observational work has been done accurately, it renders the second phase of the composing process, that of clothing the ideas in good language, relatively easy.

READING.

The formal reading lessons in the primary grades should be an expression of such familiar experiences as those the child expresses in his own composition. Otherwise the reading lesson degenerates into a mere word pronouncing exercise. The apperceptive basis for interpreting the reading-lessons based on nature may be supplied in the same manner that the basis for composing was secured. That these lessons may possess the greatest possible interest for the children, they should be in the form of a story or narrative. A lesson wherein that which has been studied is personified is better, in most cases, than a purely descriptive lesson. Emphasis should be placed on life and action and processes, on function and cause, rather than on mere form and structure, as the latter can be best expressed by means of drawings or pictures. The following lessons will illustrate the nature of the reading lesson based on Nature Study, as they possess many, if not all, of the elements of a good primary reading lesson: Bass's "Animal Life," "A House Fly," p. 58; Bass's "Plant Life," "The Babies," p. 3; Sprague's Primer, "The Robin," p. 53; Stickney's Second Reader, "A Fine Family," p. 5. Many lessons equally as good as those just referred to may be found in the following books, viz., Baldwin's Third Reader, Arnold and Gilbert's First Reader, Troeger's "Harold's First Discoveries," Morley's "Seed Babies." Before using such lessons as these,

the idea they express should be known, in the main, by the children through sense-exercise. This will cause them to approach the reading lesson with interest and enthusiasm. An intense anxiety to acquire the ability to read their experiences from the printed page will motivize the problems of the reading lesson and render their solution more easy.

In the higher grades the reading is done largely for information and inspiration. The reading lessons can not be based so directly nor so largely on the observations of the children, although they must be adapted to their apperceptive basis. All informational, as well as all inspirational reading lessons, which are founded upon nature, are much more easily and readily interpreted if Nature Study has supplied the requisite basis. Any nature literature which is adapted to the ability of the children that may be selected from such standard writings as have stood the test of criticism will be appropriate for inspiration reading lessons.

MUSIC.

The relation of mutual helpfulness that exists between Nature Study and Language, Reading and Literature exists also between Nature Study and each of the other expressive studies. If the work in Nature Study goes to the heart of nature instead of stopping with names and structure, the source of the inspiration of some of our best music is discovered and the child goes back to his music seeing in the play of the wind, the song of the birds, the ripple of the brook, the patter of the raindrops, the roll and roar of the waves and the singing of the teakettle, the elements which compose an eternal symphony. Likewise, at the conclusion of a wide-awake nature lesson, a song may be sung which will contribute largely to impress what is of eternal value in the lesson.

DRAWING.

Of its relation to drawing, Professor Scott in "Nature Study and the Child," says: "Nothing has done more than Nature Study to demonstrate the value of drawing in our elementary schools as a language or means of expression. As Nature Study has been introduced, and more emphasis placed on sense-perception, and particularly on the importance of using the eyes, more attention has been

given to drawing as a means of expressing what is seen." Mr. Henry T. Bailey, State Supervisor of Drawing, of Massachusetts, has said: "The advocates of Nature Study, not the drawing teachers, have had the honor of opening blind eyes to see drawing as a living language within the reach of all."

Drawing is the most concise means of expressing form, size and relative position. In the public schools it is of largest service if used more as a language, as a means of expressing and classifying and fixing the ideas gained in other subjects. No other subject presents such an abundance of material for use in drawing as does Nature Study. Those phases of art which comprehend painting, sewing and modeling should be based on Nature Study, also.

SCHOOL RELATIONSHIPS.

What effect has Nature Study on the establishment of proper relationships in the school? It is readily seen that the relation existing between the factors of any organization, or institution, is determined finally by how nearly the institution in its spiritual essence rises to the ideal of that institution as established by society. True relationships are not fixed by legislation, even if perfunctory compliance can be so exacted. It is by aiding and elevating the school more nearly to the plane of its ideal that Nature Study renders the largest service to the school relationships. Not until the course of instruction and the organization of the school comprehend the complete and harmonious development of all the child's instincts, in proper season, need we expect ideal relations between teacher and pupils and between the school and the community. The due recognition of the place and value of Nature Study in the curriculum will evidently do much in light of the foregoing discussion, to bring about the proper attitude of the various factors of the school toward each other.

SELECTIVE PRINCIPLES.

The purpose of Nature Study demands that the material selected from the infinite phenomena in the physical environment shall satisfy the following conditions:

(1) It should comprise those things of greatest importance to man's success or failure which are adapted to the interests and ac-

tivities of the children in the successive stages of their development, for "only such knowledge as is associated with real human interests by vigorous human action is of a quality that makes the getting of the knowledge worth the while." Evidently "those things of most importance" are those which have been of most value in promoting the development of the race, and they supply at the same time the material essential to the development of all of the laws manifest in the plant and animal worlds which it is the province of Nature Study to unfold.

(2) Life appeals most strongly to the children's interests and sympathies, hence the major portion of the material should be plants and animals. This appeal is greatly strengthened when the life can be associated with color and movement. Only such work on inorganic matter and meteorological phenomena as is closely related to the plant and animal life studied should be pursued. Obedience to this principle will insure less scattering for the materials of Nature Study, especially in the lower grades, than has been practiced heretofore. A study of a smaller variety of materials will render possible more thorough work and more satisfactory results.

(3) The material should usually be available in large enough quantities to render it conveniently accessible to each child, as this insures adaptation to individual work and investigation, to the changing seasons and to the local interests of the community.

PRINCIPLES OF ARRANGEMENT.

The sequence of the children's interests and their ability, rather than the logic of the subject, should determine the sequential arrangement of the material in Nature Study, although the importance of preserving the unity of the subject, so far as possible, should not be forgotten. This principle indicates that the pupils in the lower grades should do mainly observational and creative work, gathering data and motive for the generalizing and interpreting which should become more and more prominent, and which should gradually increase in difficulty during each successive grade. This, of course, may be done without improper subordination of observational and creative work. Unnecessary repetition should be avoided by assigning definitely the concrete material to be studied in each grade. As the detailed assignment of material to the various

grades is largely determined by the local interests and the flora and fauna of each locality, the concrete material mentioned in this report should be understood to be simply illustrative, not prescriptive.

PROVISION OF MATERIAL.

Simultaneously with the determination of the general scope of the nature material that shall be assigned to each grade for study, arises the problem of providing the material in a manner to insure the largest return to the children. If we rely alone on those materials provided spontaneously by nature, evidently two methods of procedure present themselves, viz., (1) Under the direction of the teacher, material may be gathered by the children and brought into the schoolroom. This device seems to economize the use of school time; but its employment exclusively or very largely is to be discouraged for the following reasons: (a) It is difficult thus to provide the materials as wholes or as unities which is essential to the accurate understanding of life relationship. (b) The material is not seen in its natural setting, hence it does not appeal to the child so strongly as a living, working, struggling, changing something, nor can the nature of its habitat and the physical conditions most favorable to its development be studied so well. (2) The teacher may have the children study the materials in their natural habitats by conducting field trips. That these trips may not degenerate into "picnic excursions," it is necessary that the teacher exercise a bit of generalship and plan the field lesson carefully, as any lesson should be planned, by giving the children a definite problem to solve and taking them where the material (previously sought out) that is the necessary basis for its solution may be found.

Under the guidance of the teacher, much Nature Study material should be provided through the creative efforts of the children in rearing plants and in providing suitable conditions for attracting and protecting such animal life as may be needed for study.

SCHOOL GARDENS.

That the rearing of plants may be successfully conducted at school, the school garden is indispensable. On this point, Prof. H. L. Clapp, in "Education," May, 1901, says: "The absence of the

school garden is the most radical defect in our elementary education." The school garden movement is not new in Europe. It began in Germany as early as 1837, perhaps. Now, gardens are maintained in connection with the schools throughout Europe and provision is made for training pupils along the lines of pruning, budding and grafting trees, plowing, hoeing, fertilizing land, hiving bees, raising silk, etc. Attention is given to the native shrubs, evergreens and deciduous trees. Observations on the development and gross structure of the plants reared and on the relation of animals to them are required. All of this work is credited as part of the curriculum.

In 1890, 8,000 school gardens were being maintained in Austria, where their establishment is required by law. In France, gardening is taught in 28,000 schools, and in connection with each school, a gardener capable of giving instruction in the first principles of horticulture is employed. In Sweden, as far back as 1871, 22,000 children were being instructed daily in horticulture and tree planting, and 2,916 schools had under cultivation from one to twelve acres each. In Southern Russia, out of 504 schools, 227 maintain gardens and cultivate a total of 283 acres of land. The school-garden movement in the United States has probably received more attention in New England than elsewhere. Since 1891, school gardens have been maintained to some extent in Boston. The movement has merely been inaugurated in Indiana. Last year, quite a successful effort was made in establishing and maintaining a vegetable school garden by the pupils and teachers of the Washington School, Lafayette, Ind., under the direction of Principal J. L. Glascock.

VALUES OF SCHOOL GARDEN.

The educational and civic value of a proper employment of the school garden in connection with Nature Study is not estimated highly enough by American school authorities. Indeed, the school garden is not an adjunct to Nature Study that may or may not be maintained as is most convenient; but it is a fundamental prerequisite to true Natural Study. "In the history of the race," says Hodge, "the cultivation of plants has indicated and aided the development of these elements of character which are fundamental

to civilized life: (1) Willingness to work for daily bread; (2) intelligent provision for the future; (3) courage to fight for home; (4) love of country." That these deeper relations to nature are not only "ancient and fundamental, but also imminent and persistent," is evident. Considering its fundamental character in relation to civilization and human advancement, the omission of work with the soil from education is suggestive of "relapse into barbarism," and recent sociological studies show that the integrity of city life is dependent upon its rejuvenation every three or four generations by fresh blood from the country. These studies further point out that the "highest type of spontaneous, whole-souled activity can not be developed about trifling or worthless things," that a strong character can be developed only by struggle, by active, intelligent and patient overcoming of "worth-while" difficulties. These were the elements that achieved success throughout the ancient travail of the race, and the reward is still "to him that overcometh."

The need of our youth manifesting greater love and respect for animate nature and of all alike doing more to aid in the preservation of our native valuable plants and forest trees is heard on every hand. But it should be remembered that the problem of developing the desired attitude toward these things in nature is one of forming proper associations with them, and that the "strongest and most persistent associations" are related to the will of the individual. If we would have our children manifest the proper consideration for the animate world, we must set them to work to accomplish a satisfactory result with some plants which they have chosen to care for. The fundamental basis of love for a thing is effort, sacrifice, in its behalf. The proper attitude toward things in nature is the natural basis of civic virtue. Until a child, through creative effort directed toward something in nature, produces a product of his own, which he cherishes, he has little or no foundation upon which to build regard for the rights of others.

PLANTING.

In going about the establishment of a school garden, two leading questions arise—(1) How plant? (2) What plant? So many excellent discussions of these questions are easily obtainable, that a brief statement here concerning decorative planting mainly is suf-

ficient. (See Bailey's "Garden Making," "Purdue Nature Study Leaflets," Nos. 5, 9, 14, 21, 22, 23, "Farmers' Bulletin," No. 94, United States Department of Agriculture.)

Some planting should be done in the school garden and about the school yard and property in which the chief aim is to beautify, so far as the things planted are concerned. Other benefits to be derived from such work are equally as great as those derived from any planting work. (See "Purdue Leaflet," by Dr. Coulter, No. 9.) Decorative planting is largely a matter of individual taste, both as to where and what to plant. One only needs to be guided in the arrangement of the material by the three principles of decoration, viz., (1) Plant in masses, (2) avoid straight lines, (3) leave open spaces. In determining what to plant both in garden and decorative planting, we should seek to choose those plants which bloom during the months school is in session and which the children may both plant and cultivate under the direction of the teacher. Too much importance can not be attached to planning the work so the pupils may do it. If possible, give each pupil a small bed in the garden where he can plant whatever he pleases. This will serve to develop individuality, and the condition of the plot will be the natural index of what a child knows and what he is able to do by himself. In general, our lack of sustained enthusiasm demands that we plant those things that do not require too much care. The following suggestions as to planting are offered:

1. Hardy Shrubbery.—The efforts at first should be devoted to the rearing of hardy shrubbery and perennials, as follows: Lilacs, snowballs, spireas, syringas, weigelas, hydrangia, flowering currant, Japanese currant.

2. Hardy Bower Plants.—The growth of the shrubbery will serve as a background for the planting of hardy flowering plants. In choosing the plants, we should seek to secure vigor, harmony and beauty. These might be chosen: Perennial phlox, delphinium or larkspur, golden glow or rubbecia, convallaria or lily of the valley, different varieties of asters, digitalis or fox glove, hollyhocks, oriental poppies, sunflowers, ferns.

3. Showy Flowering Plants.—Spiderwort, butterfly plant, zenia, nasturtium, petunia, sweet william, begonia, violet, morning glory.

4. Hardy Vines.—These probably afford the largest return for

the investment of anything that can be planted. They are not only beautiful in themselves, but they serve to cover unsightly places. Fortunately, we have many native varieties, most of which are hardy. The selection of vines may be determined by the purpose in view, whether for fence, wall or trellis.

a. Suitable for Fences.—These may be planted either in spring or fall: Virginia creeper, Japanese ivy, cinnamon vine, wild clematis, wistaria.

b. Suitable for Wall or Trellis.—These plants require rich soil and a reasonable amount of sunshine: Honeysuckle, climbing roses, wistaria, clematis, ramblers, moon flowers.

c. Suitable Creepers for Shady Places: Myrtle, Virginia creeper, partridge berry, creeping charley.

Both in garden and decorative planting those things may be chosen which will secure, at the same time, both the end sought in the plant work and the provision of food and haunts attractive to animal life needed for study. At least, the birds may be thus attracted and protected. In the selection of trees for planting, both ornamental and fruit trees should be chosen and varieties that are both instructive and pleasing should be secured. Some rare varieties of ornamental trees should be planted.

Hodge says: "By being content to begin in a moderate, sensible way, by planting those things adapted to local conditions and needs, a school garden is reasonably sure to grow in favor and the most radical defect in our elementary education may be soon supplied." (See Hodge's "Nature Study and Life," chapters 8, 9, 10 and 11 as to School Gardens, etc. The planting and its products will afford opportunities for sufficient experimental work and the first-hand study of such topics as the following: Differences in soil, different soils demanded by different plants, varying depths at which different plants should be planted, sunlight demanded by plants, insect visitors and relationships of plants and animals, methods of maturing and scattering seeds, etc.

Some results can be better secured and time can be saved in conducting certain observations and experiments, if the planting is done in the schoolroom. This is especially true in the work with the first two grades. Because of this fact each of the lower grade rooms should be supplied with a planting box. The school planting will not have accomplished its largest value until it succeeds in

interesting the children and parents in the establishment and proper maintenance of gardens at home. The opportunity of the school in this direction and the value of home gardening, if properly conducted, is ably discussed in chapter 8 of Hodge's forthcoming book on Nature Study; but the limits of this report preclude the further discussion of this vital topic here.

AIDING ANIMAL LIFE.

In addition to the help that may be rendered the birds and other lower animals, which we desire for study, by planting trees, shrubs and other plants which grow food for them and provide their natural haunts, is that aid which we may afford them in the following ways: (1) By providing nest-building materials and other suitable nesting places than those which are provided through planting; (2) by protecting those, which from our standpoint are most deserving of help, from their natural enemies, (a) by killing the enemies and (b) by not providing the food and haunts suitable to their enemies; (3) by providing them with necessary food and bathing places, and (4) by manifesting a sympathetic attitude toward them at all times. The above directions are more especially applicable to the methods of aiding the birds, but their spirit and meaning may be readily adapted to the problem of aiding the other lower animals. A little wholesome rivalry may be allowed to develop between the boys who are willing to compete for the best results in the building of bird-nesting boxes, with much profit to the boys as well as much pleasure and profit to the birds.

METHOD.

Finally, how shall the materials to be employed in this course be dealt with that the results of true Nature Study may be realized in the lives of the children? The committee feels that the answer is so fully implied in the foregoing discussion that a detailed statement of the methods of Nature Study, at this place, would not only be superfluous but uncomplimentary to those who take the time to study this report. A suggestion as to the advisability of so much simplifying and "sugar-coating" Nature Study in the lower grades may not be out of place, however. This tendency has been very

marked in the past. It is but one phase of the larger tendency to simplify all school work. This evil of "over-simplifying" has resulted from an attempt to adapt the work to the apperceptive basis of the children. The general aim is laudable, but the presentation of facts and conditions in nature mainly by use of the myth and fairy tale is certainly to be avoided, as it gives the children incorrect impressions and distorted ideas and amounts to little less than lying. For an elaborate discussion of this question, see an article in "Education," June, 1900, by Caroline Soule, and another article in "Education," Vol. 17, by Professor Holtz.

THE COURSE BY GRADES.

EXPLANATORY.

The following formal statement of a course in Nature Study extending through the eight grades of the common schools has been prepared in accordance with the theory set forth in the preceding pages. The committee does not contend that this course is ideally adapted, in the amount of work provided or otherwise, to the needs and conditions prevailing in any school or class of schools. They simply intend that it shall illustrate and clarify the attitude maintained in the theoretical portion of the report. However, the aim has been to employ such illustrative matter as is adapted to the ability of average children in the grade to which any particular work is assigned, and to arrange the matter in proper sequence. No attempt has been made to indicate the term or month in the year that particular work should be done, as the judgment of the teacher and the superintendent who are confronted with a concrete situation must finally determine such details. Both the materials employed and the order of using them will vary with the school, and even in the same school from year to year. This flexibility in Nature Study courses must ever maintain, if the work presented is adapted, as it should be, to local interests.

Whether a course in Nature Study is established and maintained in every school in Indiana will be determined primarily by the equipment for and enthusiasm in such work on the part of each teacher. Teachers of Nature Study must know the subject, else all of their efforts to teach it will prove futile.

In organizing a course in Nature Study where it has not been taught, the most satisfactory results will be obtained, probably, if all grades begin with the elementary work. Because of the varying ability of the pupils in the different grades, the work of each grade will soon become sufficiently differentiated to eliminate all confusion. In order that "worthwhile" results may be obtained in Nature Study, it must be given rank and time equal to that accorded the other leading subjects in the curriculum.

FIRST GRADE.

ANIMAL LIFE.

Begin the work with the dominant play interests of the children by conducting conversational lessons about their pets. The point of emphasis in these lessons is the relation between the individual child and his pet, not the number and kind of toes each has, etc. In talking about the pets each has, develop how he cares for them and what he does with them or how he plays with them, why he likes each and what he thinks of the character, intelligence, habits and dispositions of each, the health and cleanliness of each. Make prominent in these talks, without moralizing, the value each pet is to its owner and the necessity and justice of the owner contributing in every possible way to its happiness by providing them with (1) food, (2) shelter, (3) protection from cruelty, (4) kind treatment. In the development of the child's emotional and moral life, his relation to his pet is of great importance. Professor Hodge says: "Nothing is better fitted to develop patience and conscientious carefulness than the daily attention to its needs. Unselfishness is fostered by this care and by the generous sharing of his good things with his humble friend."

Teachers should remember that the knowledge the child gains of the pet animal as a whole as to its habits and life, individual character as to intelligence, disposition and affection for its master, its health and well-being, is infinitely more living and real than that imparted by any other method of instruction. Again quoting Hodge: "By its associations with the child's spontaneous activities in caring for his pets this knowledge becomes a part of his life, and will thus enter into the formation of his character to exert its civilizing influence as long as he lives. Of how little value, compared with this, is learning names, schemes of classification or anatomical structure."

This sympathetic relationship existing between the children and their little animal friends may be accentuated by allowing the children to bring their pets to school, provided it does not prove a source of annoyance; but remember always that the purpose in having them do so is not to emphasize details of structure, but the interdependence existing between the pets and their owners.

With these dominant interests as a starting point, the sympathies of the children can be extended to the larger animal life about them. Teach the children to recognize some of the more common birds by their color and song. Those with bright plumage will appeal most strongly. The following birds might be the best ones to use in some localities: Robin, redbird, blue jay, woodpecker, bluebird, sparrow. The aim should be to have the children desire to become as intimate with the birds as with their own pets and to have them feel a concern for their welfare equal to that they manifest for their pets. If any child manifests a special interest in some one species of bird, encourage him to elect to become its personal friend and helper. Lead the children to see that they may contribute to the happiness and welfare of their bird friends (1) by giving them meat and crumbs from the table, (2) by placing a pan of water where they may bathe in it, and (3) by keeping the pet cat where it can not kill them or molest their nests. Implant the thought in the minds of the children that they

should aid all helpful animals in every possible way. (The teacher should read Hodge's Nature Study Leaflet on "Our Common Birds.") Aiding the birds and other animal life will develop a love for the same, for a person is sure to love those things about which his work centers to which the effort and energy of his life is devoted.

A few insects and other lower animals may be included in the child's world. These are suggested: Butterfly, carpenter bee, dragon fly, moth, honey-bee, turtle, frog. The interests of the children in the animal life that is all about them should be stimulated at every opportunity. No child should be repressed because he desires to report his observations on an animal not "slated" in the course of study.

The class bird calendar is a helpful device in stimulating interest and careful attention to the changing bird life. The following form is suggested:

Name of Bird.	Date.	Name of Pupil.	General.
Bluebird.	April 10.	Mary Miner.	.....

The above entry should be made in the calendar, which ought to be kept neatly upon the blackboard, when the bluebird is first reported to have been seen. Mary Miner is the name of the child who made the report. Any point of special interest in the report might be entered in the column for general notes. The use of a calendar similar to this should be continued through the first five grades.

PLANT LIFE.

There is a race impulse in children which demands immediate acquaintance with the soil and its products. This is the basis for providing work with plants early in the lives of the children. Seek to introduce this work through the dominant interests of the children by talking with them about those flowers which they all know. These may be flowers their mothers cultivate in the home or flowers with which they have played. Lead each child to indicate the flowers he likes best and encourage him to bring you one of each. These conversational lessons will lead to a discussion of how each child may aid the plant. In the course of these talks, start the class garden by having the children plant some seeds, which they may be induced to bring, in the planting box. Of course, this work must be done under the direction of the teacher; but the children should perform every labor that they are capable of performing. They should be encouraged to bring their own planting pots to school, also, that each child who cares to do so may plant a few seeds on his own responsibility entirely. Those children who plant in individual pots should be encouraged to compete for results. The aim is to raise the best plant possible. Those most interested will probably plant a few seeds at home, also. If so, encourage their interest by hearing reports of the success that each child is attaining in his planting venture. Only those plants which are easiest to rear should be employed in the lower grades. They should begin it in the fall term, as suggested above. During the spring term the pupils of this grade should plant a class bed, under the teacher's direction, in the

school garden, and each child who desires to use it should be given a small individual plot in the school garden in which he may plant what he chooses. Contact with the soil is not only educative but it interests the children. Alice Freeman Palmer says, "Give a child large interests and give them young." "It is important," said Froebel, "to train the children early to work and industry." Early impressions are proverbially deep. This planting work is "so fundamental, simple and primitive that young children, excepting only the abnormal and spoiled, will enter into it with delight, and by this act enter into civilization," says Hodge. By eight or nine the child's brain has practically attained its adult size. While refinement of structure may go on even into mature age, the fundamental lines are laid down, and the basal habits and philosophy of life are pretty solidly established. If habits of indolence, carelessenss or possibly vice have been formed, and vitiated tastes and appetites have been allowed to develop, the reformation will be so much harder, and the results fragmentary and unsatisfactory, therefore the schools should begin early in the child's life this work which has developed such valuable traits of character in the race.

In addition to the work with plants in planting, teach the children to recognize by name some of the commonest plants which they see daily. These should be observed simply as units, that the form memory of the species may be complete.

Adapt the suggestions as to the keeping of a bird calendar to the work with plants.

INORGANIC MATTER.

In connection with planting, the children will readily learn to distinguish clay, loam and sandy soils. A force they will find indispensable to plant growth is water, which may be made the center of study as follows (See Scott's "Nature Study," p. 463): Uses of water to (1) man, (2) animals, (3) plants, (4) earth. What water does—(1) dissolves things, (2) transports things, (3) soaks into things.

GENERAL.

Observations on position of sun and length of its shadow at a certain hour in the day twice per week.

Observe weather phenomena daily at a certain hour, recording observations on "weather" calendar as soon as pupils can appreciate calendar and noting following points: Dew, frost, fog, cloudy or clear, direction of wind, kind of night last night, kind of day.

Make no attempt to relate these phenomena to the condition of the animate world except as children's questions demand.

SECOND GRADE.

Study carefully the introductory matter on Nature Study and the first year outline for the spirit and fundamental principles of this course. The teacher of each grade should have not only the general plan of the work in mind, but she should know thoroughly the details of the work that precedes and follows hers in order that the unity of the work may be preserved throughout.

Laurie says: "To establish a relation between the child and nature, the first step must be sympathetic, not systematic." A clear perception of this fundamental principle, especially in the primary grades, is of vital importance in all phases of nature study work.

A child is interested in classifying and studying the structure of those things only which he loves, and he loves only what he has labored for and put his life into. Even a child sees from his standpoint the relation of those things with which he works or plays to his success or failure. This perception of the economic value of the various things in the child's environment of nature is not only the basis for the sympathetic attitude of the child toward his physical environment; but it is the basis of the intellectual, æsthetic, ethical, social and religious culture which should come to every child from studying his environment of nature. Throughout this course, every form studied should be viewed as to its all-round relation to man's welfare and happiness.

As the pupils of each succeeding grade become possessed of greater insight into what life, plant and animal, is sufficiently valuable to man that it should be perpetuated, they should act in accordance with the obligation this increased knowledge imposes. Teachers should strive to have every child active in aiding, in every possible way, all plant and animal life which is helpful to man. In the accomplishment of this end, it is well to have each pupil select every year both a species of plant and animal which he intends to study and observe, and which he will seek to protect and aid to the full extent of his knowledge and ability.

ANIMAL LIFE.

At the opening of school in the fall, utilize the vacation experiences of the children and connect with the spring work on birds by having them tell you what they have learned since school closed concerning the birds which they were taught to recognize in first grade. Encourage the children of this grade to continue their efforts to aid the birds along all lines previously begun, and have them begin to put out materials which may be of service in nest building. Let the aim be to become more and more familiar with those worked with in first grade and to learn to recognize other species of our common birds by color and song, as meadowlark, blackbird, crow, turtle dove, flicker. Enlarge the list of animals other than birds that children should know at sight; especially observe the cycle of changes as fully as possible in the life history of the butterfly. This detailed study here is chiefly to stimulate an interest in insect life. (See Weed's "Insect Life.") No attempt should be made in this grade to study details of structure. Give large opportunity for the interests of the children to express themselves in art, language and reading. Do not forget that the children of this grade are still interested in their pets. Extend this work along lines suggested for first grade. Encourage the children's interests in things in nature not especially assigned to this grade for study, in all ways possible, as by hearing their reports on new things they have observed to tell you and by utilizing every specimen they bring you. Let the teacher impress upon the children that even they can discover new things in nature to report.

PLANT LIFE.

If the school garden planted in the spring has been properly cared for during the summer vacation, begin the work of this grade by observing the results of the spring work and planting. Talk about the changes that have occurred in the plants since school closed, and note carefully each successive change from the opening of school until winter begins in earnest.

If the garden matures any seeds, do not fail to collect them for use in this year's planting. If no seed is gotten from this source, have children gather some from other sources and preserve them. Planting should be done this year along the lines suggested for first year, except that there should be more individual planting than was had in first year. The children should always do all of the work they possibly can with as little direction from the teacher as will serve. If beans and nasturtiums were chiefly grown in first grade, they might again be used in this grade, and, in addition, one might plant corn, sweet peas, and sunflowers.

In the fall the children should learn to recognize such nut-bearing trees as the hickory, walnut and chestnut by fruit, bark and leaf. They might also learn the thistle and milkweed by observation and experience.

Have children renew acquaintance with the common spring wild flowers learned in first grade. It would not be unreasonable to expect the children to know eight or ten such common flowers as the following by the close of the second year: Bloodroot, trillium, blue violet, star of Bethlehem, spring-beauty, Solomon's-seal, Indian turnip, butter-cup.

Do not fail to have the children take cognizance of the beauty of nature as it passes from its summer into its winter condition, and from winter into spring. The appeal of this phase of the work may be greatly strengthened by a wise use of poems, paintings, stories, and songs.

Encourage any child who can loan his teacher the use of any beautiful pot-plant his home may afford. Such a plant may be borrowed only during its flowering period. The value of such a loan is doubled if the child through which the loan is secured has contributed to the attainment of the result that the plant manifests. Such loaning on the part of children will stimulate their interest in the home plant growing, it will form a bond between the home and school, and it will contribute much to the attractiveness of the schoolroom. Under the teacher's direction, the child loaning the plant should care for it. This practice of the children loaning plants to the school, if properly managed and safeguarded, may be made of increasing value during each successive grade.

INORGANIC MATTER.

Review the work of first grade under this heading as a basis for the following work. The point of emphasis in this work is the relation of moisture in connection with heat to man's welfare as they influence plants and animals which he is dependent upon. Relate work to planting and to observations on animal life.

Study evaporation of water by observation. (Scott, pp. 465-476.)

Evaporate some water rapidly in the presence of the class, pupils doing work as far as possible. Do not press the children to understand fully the physics of evaporation. Allow some water to evaporate slowly in schoolroom. Note common instances of evaporation, as clothes drying, etc.

Study condensation of water by observation, having pupils conduct experiments under your guidance. (Scott, p. 476.)

Round up this cycle in which a general study of water has been made by noting what becomes of water which falls—some evaporates, some soaks into soil, some is taken up by plants and animals, and some "runs off." Observations upon the escape of water by running off gives rise to a study of the life history of the booklet, as follows:

1. Why it runs away and what determines its direction.
2. What it does on its journey. (This touches first grade work again.)
   a. Water plants and animals.
   b. Carries mud, leaves, seeds, etc.
   c. Cuts away earth and rocks and transports them.
      This gives basis for interpretation of land forms in early work in Geography in fourth grade.
3. What its fate is—flows into a larger body of water and there it evaporates and begins life anew.

The child should see clearly from the above work that the brooklet is a working unity.

GENERAL.

Continue work as outlined for first grade.

THIRD GRADE.

ANIMAL LIFE.

As in the preceding grade, the inclusive purpose is to develop the sympathetic attitude on the part of the children toward the animate life in nature.

The work with birds in this grade will be to become more intimately acquainted with those the children have learned to recognize in the first two grades. This should be the first work (1) because the children have been too immature to observe adequately enough the species they know by sight, (2) because of the disciplinary value of continuous observation of the same things, and (3) because the species they know should be more carefully studied for economic reasons. In so far as possible, the observations should be spontaneous. The children should be led to note where each species lives and nests; how it plays, bathes, attends its young; what it eats, etc. Let the effort of the children be to become, as far as possible, as intimate with each species studied as with their own pets. Bring out from their observations how helpful these birds are to man, and how we may help them and domesticate them—

1. By protecting them against their enemies. Perhaps, the greatest enemy to the more common birds is the vagabond house cat. Mr. Forbush estimates that on the average a cat kills fifty song birds a year, and he has known of a single cat destroying six birds' nests in a day. If cats must be kept, they should be more carefully watched and more closely confined. Abundant feeding and careful training of cats will do much to check the destruction of birds. If the sympathies of the children are elicited in behalf of the bird life, they can do much to thwart the destructiveness of cats and other marauding pests.

2. By providing them with food when the struggle for life is too keen for them. This may be effectively done by the children in two ways:
   a. By rearing such hardy plants as yield a natural food supply for them, as sunflower, pokeweed, mulberry, elderberry, juniper.
   b. By giving them meat and crumbs and other food when their natural food is rendered inaccessible by snow and ice. The birds welcome a bone placed in a tree where they may peck it.
3. By providing them with nesting and bathing places. Nesting places may be provided by planting shrubbery (see introduction) which supplies the natural haunts of the birds and by providing properly located boxes in which the birds may nest. There is no child but that can supply a pan of water, conveniently and safely placed, in which the birds may bathe. Any one who has observed the evident delight which our birds take in a little fresh water will fully appreciate the value of this service to them.

The ethical value of doing proper things can not be overestimated. This phase of the work may be furthered by reading inspirational stories of bird and other animal life, whose chief purposes are in harmony with this idea.

Continue to stimulate the interests of the children in all of the animal life about them in ways previously suggested. Observe the cycle of changes through which the frog passes from the egg to maturity. The major portion of the observation on the frog may be conducted in the schoolroom.

PLANT LIFE.

We should seek to introduce this work at the opening of school in the fall much as it was introduced in the second grade. The teacher should quickly acquaint herself with the children's knowledge of plant life. Talk with the children of their planting experiences and help them to see how they may profit in this year's work by their past experiences. Encourage each child to express early the species of flower he has chosen to render special care during the year.

While the planting must be largely directed in this grade by the teacher, yet the children should proceed somewhat more upon their own responsibility with each successive grade. The planting this year may employ any or all of the species of seeds used in the preceding grades, and the zenia, cotton plant, and such other well-known plants as readily resist partial drought. In the planting that is done at home, after the teacher and pupils have discussed the preparation of the soil for the seeds, the planting of the seeds and the care of the seedlings and the growing plants, each child should be left to his own ingenuity. The aim always is to raise the best plant possible. Children should compete for results. Such competitive work combines many good elements, as it becomes a contest game between the children in which is employed sun, earth, air and water. Informal talks with the pupils from time to time will develop many points about the best means of securing the proper amount of light, heat, moisture and food for their plants. Surrounding a plant with the conditions

which are conducive to its best development is analagous to the problem of surrounding a human life with such conditions as will insure the best possible growth of body, mind and soul. The ethical value of such work is evident. "Patience, carefulness, faithfulness in little things, continuity of purpose, are all instilled unconsciously, and, best of all, the children come to love their flowers as parents love their children." Professor Hodge says, "The love of a flower in the heart of a child is the highest thing that Nature Study can hope to develop."

The competitive rearing of plants at home should be supplemented by planting at school, under the direction of the teacher, both in the schoolroom and in the school garden. Let the preparation of the soil and the planting of seeds be done by the children as far as practicable and let them attend to preserving the proper conditions for the best germination of seeds and for the best development of the plants. The rearing of a plant not only has back of it the great value of doing and accomplishing, but it also enables the child to see the life cycle of the plant, and thereby to appreciate in some measure the unity and purpose that pervades the many changes in nature during a single year. The teacher should remember that the controlling aim in all the work with plants is to see the relation existing between the plant and its owner, what each gives and receives from the other, not what kind of roots or leaves the plant bears.

In connection with the work in planting, extend the pupils' acquaintance with the common wild flowers. Renew acquaintance with those learned in the first two grades. Transplant some of them from their wild habitat to the school ground or home lawn after providing the requisite conditions for their growth. (See Dana's "How to Know the Wild Flowers," Scribner's.) By the close of the third year the pupils should know by sight, at least fifteen common wild flowers. During the fall acquaint the pupils with the burdock, beggar-tick and cocklebur, and with other nut-bearing trees than those learned in third year.

Carry out suggestions made as to other lines of work in first two grades.

INORGANIC MATTER.

Have pupils rethink work of first and second grades on water as a basis for what follows. Study forms of water by observation, uses of each form, etc. (See Scott, pp. 478-512.)

Study soil formation as follows: (Relate to planting work.)

A. Origin of soil. (See Scott, pp. 513-519.)
   1. Decaying plant and animal forms.
   2. Disintegration of rocks as result of action of following weathering agencies: (Incidentally pupils will learn different kinds of common rocks.)
      (a) winds, (b) water, flowing and falling, (c) changes in temperature, (d) plants and animals. (The work on water here will review much of the work previously done. This study of soil formation will teach the children another valuable lesson that even the earth is a living, working, changing mass.)

GENERAL.

Follow directions for second grade, except note temperature at hour of observation. Keep simply a class record of observations.

FOURTH GRADE.

ANIMAL LIFE.

As in the second and third grades, connect the work of this grade with what has been done by bringing the birds and other animals that have been studied under active observation again this year. The aim is to have the children deepen their knowledge along all lines of previous study to the end of increasing the sympathetic relationship between the children and the animal life studied. Observations along entirely new lines should be begun also, by having pupils note changes in habits, appearance, habitat and food of birds and other animals as seasons change. The children in this grade can not be expected to give adequate reasons for the changes observed, but they should be led to see the "why" back of their observations to the full extent of their abilities. In this grade have pupils note the exact time of the disappearance and reappearance of our migratory birds and have them become quite familiar with the habits of life of those birds that remain with us through the winter. The children should be quite familiar with, at least, twenty different species of birds by the completion of the fourth grade. They should know as fully as possible from observation to what extent each species of bird uses vegetable food and the kind used. The same knowledge of each species as to animal food eaten should be sought, also. They should know the time and place that each species nests, what materials each uses in building nests, what and how much the young eat. A knowledge of the birds along all lines suggested thus far is essential to the work of the fifth grade. During this grade, review the observations on the butterfly and frog and observe the development, food and habits of life of the common toad. (See Hodge's Nature Study Leaflet on "The Common Toad.") The motive in all of this work is to see the relation of the animal studied to man's welfare. To see this truth involves seeing the animal's place in the great economy of nature and insures the fullest discipline to the pupil which Nature Study affords.

PLANT LIFE.

See second and third grade directions as to the opening work in the fall. Have children see in the seed a means of tiding over the plant life during the severe winter months. This will lead to a more definite study than has been taken heretofore of the character of seeds and their methods of dispersal. Children should become familiar with plants employing such agencies of dispersal as—

1. The wind; e. g., corn, grasses, ironweed, ragweed, dandelion, maple, lettuce.
2. Animals; e. g., burdock, beggar-tick, cocklebur, stickweed.
3. Water; e. g., bladdernut, locust, basswood, sedge, grape.

In general, those seeds which employ air currents have sails or other attachments for utilizing this force; those which use animals are provided with grappling hooks; while those that depend upon water are provided with air chambers that serve as floats.

While interested in seed dispersal, the pupils should discover the gross structure of the seeds observed and of the plants which reared them. They may be led to see the essential marks of the two large classses of angiosperms—

1. Monocots—corn, grasses, sedges, etc., (a) parallel veined leaves, (b) flowers three or multiples, (c) wood fibres scattered.
2. Dicots—bean, squash, etc., (a) net veined leaves (b) flowers in fours or fives or multiples, (c) wood fibre compact.

Do not fail to impress, as was suggested in second grade, the beauty of nature's dress as fall merges into winter. Children may be led to see the colors and associate them with the trees to which they belong as follows:

1. Yellow—beeches, birches.
2. Variegated—maples.
3. Scarlet—sumachs.
4. Reds and browns—oaks.

Observe the general condition of the plant world during the winter months. That Nature is acting wisely may be made clear and interesting through the study of terminal buds and their protection from cold and moisture. The buds of the chestnut, lilac, maple, pussy willow, etc., will furnish excellent material. This study will afford a good apperceptive basis for the study of those changes which attend the burst of nature from its winter sleep into spring. This process may be anticipated to some extent by placing freshly cut stems of the chestnut, lilac and other plants which bear terminal buds in water, and having the children observe their orderly unfoldment.

Continue competitive planting and home and school gardening. Introduce the children to at least ten species of common wild flowers not previously studied. Observe them along lines previously suggested. The training received from transplanting wild flowers renders this exercise very valuable in addition to the decorative value it possesses.

Observe throughout the year the cycle of changes occurring in some species of common nut-bearing tree that is easily accessible. Introduce this work by having the children observe some of the values of trees to man—(1) give shelter, (2) supply wood and lumber, (3) hold moisture, etc. Make the relation of the species of tree selected for study to man prominent in all observations.

INORGANIC MATTER.

Study uses of air, relating points to the work with plants and animals. Study energy as expressed in heat its uses to man. Its expansive force as shown in solids, liquids and gases should be developed by experiment.

GENERAL.

Follow suggestions given for preceding grades. Try to show the relation of the sun's position and the length of its shadow to the seasons, and the length of day and night; also, the relation of all these phenomena to

the life upon the earth. This may be made clear through the study of (1) migration, (2) hibernation, and (3) storing of food as a means of tiding over the winter months.

FIFTH GRADE.

ANIMAL LIFE.

Connect the work of this grade closely in all lines with that pursued in the preceding grades. Review the pupils' knowledge of all birds studied in previous grades, especially as to their feeding, nesting, breeding and migratory habits, to establish a basis for determining what birds of those studied are helpful and what harmful. You will probably find the pupils' observations too limited on the points necessary to make this classification; if so, have the pupils direct their observations throughout the year to the solution of this problem. Do not permit a pupil to classify any bird as helpful or harmful until his data is entirely adequate. The question of helpfulness or harmfulness is many sided. In some of its specific habits, a bird may be harmful to some of our property, though the sum total of his life activity is in our interest. The wood-pecker, for example, is fond of ripe cherries, and he helps himself whenever he finds them. From this point of view he is injurious to man's welfare; but if we consider the many hours of ceaseless activity during which he has made war on those insects which would have destroyed our cherries, we see in him a helpful friend. For helpful suggestions in this work, consult the following publications issued by the United States Department of Agriculture: "Some Common Birds," "The Meadow Lark and Baltimore Oriole," "The Common Crow," "Apple-Tree Borers," "The Blue-Jay and Its Food," Cornell and Purdue Study Leaflets.

To furnish a more adequate basis for determining the helpful and harmful birds it will be necessary to extend the pupil's knowledge of the insect life which insect eating birds prey upon. (The work with plants will supply a basis by the time this grade is reached which will enable the pupils to determine, from the standpoint of plant life, which birds are helpful and which harmful.) We must discover which insects are helpful and what ones are harmful before we can classify our birds as friends or enemies to our interests. It is readily seen that this problem of determining what animal life is helpful and what harmful to man must be one of the problems before us in Nature Study throughout the remainder of the grades. To classify an insect as helpful or harmful, one must know its complete life history and all of its habits at each stage of its development. This life cycle study is necessary also to reveal the weakest point of attack should we wish to make war upon any species of insect. This grade might study the life cycle, habits and food of the following, as types: Tent caterpillar moth, cabbage butterfly, cutworm, tomato worm, potato beetle, etc. (See Weed's "Insect Life.")

In addition to having pupils become more familiar with the birds previously studied, have them study ten species of birds not studied before. Whenever a species is taken up for study, it should be viewed in the light of all of the pupil's past experience. The boys should be able to provide better bird boxes in each succeeding grade.

This question as to what life is helpful and what harmful should be asked of every animal form studied thus far and of every form that is studied in the following grades. If the fishes, newts, turtles, frogs, snakes, ants, earth-worms, mosquitoes, etc., are studied with a view to answering this question, our children will come to manifest more respect and consideration for some of our valuable animal forms which are now treated with contempt, and in cases where contempt culminating in destruction is proper it will be intelligent, and it will lead to a choice of proper means and an opportune time for the destruction of such forms.

PLANT LIFE

Follow suggestions for the preceding grades as to planting and other lines of work. Add to the observations on the influence of heat and moisture upon plant life, a study of the importance of light to the life of plants. The following plan is suggested by Dr. S. Coulter:

"Germinate a number of seeds, and when the seedlings are three or four inches high place them under different light conditions. Let the experiments answer the following questions:

"1. How does light affect rapidity of plant growth?

"2. Does light affect the direction in which the parts grow?

"3. Does light affect the color of the plant?"

(See, also, Atkinson's "First Studies in Plant Life.")

Experiments to prove that plants throw off moisture should be conducted, also.

This study of the light relation is to make clear the first of a series of phenomena which will serve as a basis for investigating the great law of adaptation. It is therefore of great importance that the effect of this struggle for light upon the plant be clearly brought out. This may be simply and effectively done. Have the children examine the arrangement of the leaves of (1) any ivy, (2) nasturtium, (3) sunflower, (4) castor bean, (5) begonia, (6) maple tree, (7) milkweed, (8) bugleweed.

Upon looking at these as units, the utilization of all available space for leaf exposure to direct light will be very apparent. The chief purpose in this study is to bring to the consciousness of the pupils the fact that all green plants have at least one problem to solve, that of securing direct sunlight for their leaves.

One purpose of introducing the study of the light relation in its simplest form in this grade is to bind the various plants to which the children have been introduced into some sort of unity. It is an effort to avoid nature study "hash."

Observe throughout the year the cycle of changes in some domestic fruit tree. See fourth grade for suggestions along this line. Rethink economic value of trees to man.

Study ten species of common plants, not previously studied. Let five of the plants studied be those which are considered poisonous or dangerous, as poppy, nightshade, larkspur, Jamestown weed, poison ivy. The other five plants studied should be those fertilized by animal agency, as sweet pea, nasturtium, violet, morning glory, red clover. The study of the last five will direct attention forcibly to the relation of interdependence existing between the plant and animal worlds. Incidental to this

observation, the pupils should become familiar with and know by name the organs of a typical flower. Through observation the use of these organs will become familiar, also.

Review all plants previously studied and adapting the meaning and spirit of the directions under animal life to the work with plants, begin the problem of classifying them as helpful and harmful. Remember a plant may be annoying and seemingly useless to man and yet afford much necessary food to the birds that destroy injurious insects; e. g., the pokeweed. This suggests that the all-round value or injury of every plant studied must be investigated before classifying it.

INORGANIC MATTER.

Study energy as expressed in coal, oil, and natural gas. We have already developed the fact that plants and animals must solve the food and shelter problems. Plants do this by forming seeds; the lower animals by migrating, hibernating, or storing food. Man stores food to live upon in unfavorable times, and fuel to keep him warm. It follows that deposits of coal, oil and natural gas, which are good fuels, will be centers for establishing the social community. This connects closely the Nature Study and Geography.

GENERAL.

See directions for fourth grade.

SIXTH GRADE.

ANIMAL LIFE.

Continue the problem of classifying the birds and all other animal life as helpful or harmful to man. This problem furnishes the motive for learning every detail of structure and every technical term the pupils need to know, and it is only by solving this problem that man can make a rational response to the effect that the animal life exerts upon him. Have the pupils in this grade become familiar with ten species of birds not previously studied along all lines that have been suggested. By the time the work of this grade is completed, the pupils should know, at least, forty species of birds by color, flight and song, or call.

When the data is sufficient to give a fairly true picture of the life habits of each species under consideration, have the pupils note with reference to each species studied the peculiarities of bill, wing, tail, feet, covering, coloring, etc.

They should be led to see that the general form, and the details so far as known, of each species is in harmony with its life habits. The woodpecker, for example, is almost exclusively arboreal in its habits. It excavates a nest in the side of a dead tree trunk, the opening being only sufficiently large to admit his body. The nest is expanded toward the lower portion into a capacious chamber. This small opening affords protection from many of his enemies. His food consists largely of borers which he obtains by drilling holes into the hard wood. To do this he

must support himself firmly against the tree trunk. To accomplish this effectively, nature has given him feet with two toes in front and two behind, and tail feathers that are stiff and pointed to serve as props to his body as he sits on the side of a tree. His bill is long, cylindrical, hard and pointed for drilling; his tongue may be greately extended, and it is provided with a spear-like extremity that it may be of service in drawing grubs from their hiding places.

Pupils may be led to see that swimming birds have web feet, very oily feathers and a body and a bill of convenient shape; that wading birds have long necks and long legs which are free from feathers; that birds of prey possess great strength and have claws and beaks especially suited to their mode of securing food; and that perching and scratching birds have a structure peculiar to the mode of life each leads. The pupils should be led to see that this principle applies to all animal life.

To aid in the elucidation of the principle that structure is determined by function and to further the classification of animal life as helpful and harmful, introduce the study of a few invertebrates. One might profitably select those species which are very common and which are instrumental in securing the cross-pollination of flowers. We suggest the study of the honey-bee, bumble-bee, sphinx, moth, monarch butterfly, etc.

These species should not be studied in detail. By observation the children will learn that their food is the nectar of the flower, and therefore a liquid. They should then notice the general shape and arrangement of the mouth parts, as they are of primary importance in securing this food. This observation will afford a basis which will enable the children to see that the structure of these parts is adapted to their use, or function. Observe in passing that the bodies of the bees are covered with short hairs, and that downy scales cover the bodies of the moth and butterfly. This observation will aid in establishing the life relation which exists between these species and the flowers they pollinate.

Study as many as possible of those forms mentioned in the last paragraph of the work for fifth grade on animal life that have not yet been studied.

PLANT LIFE.

Continue the planting and other lines of work as directed above. Work with the species of plants which are more difficult to rear. Observe throughout the year the changes in some species of evergreen. Continue work on the problem of classifying plants on the basis of their economic value; i. e., as helpful or harmful. Observe five to ten more species of plants not previously studied. Part of the plants studied might well be those fertilized by animal agency. Those might be chosen which are pollinated by the insects studied above. The bleeding heart, scarlet runner, flowering bean, snap-dragon and bluebell will serve, if they have not been studied in a lower grade. The remaining plants studied in this grade might well be of the poisonous type.

By this stage of the work the pupils have observed numerous instances of cross-pollination through animal agency, and they are now prepared to receive from the teacher a simple dogmatic explanation of the significance of cross-pollination. Then the pupils should begin the solution of

these problems in greater detail: (1) How is cross-pollination secured? (2) Is the structure of the flower adapted to secure cross-pollination and to prevent self-pollination? The attempt to answer these two questions will lead the children to study some of nature's most beautiful adaptations.

Have them study somewhat in detail the structure of the flowers above enumerated, giving especial attention to the general form of the corolla and to the relative positions and lengths of the respective stamens and pistils. With the general configuration of the corolla, and the problem of each flower of securing cross-pollination well in mind, have the children make careful observations on each of these flowers, recording the kind of insects which visit the flowers, and also the number of visits during any specified time. When their observations have established the fact that one kind of flower is visited most frequently by a special insect; e. g., the snapdragon, by the bumble-bee, discuss the question as to what the bee obtains from the flower. Since it receives some service from the flower, then the natural question is, what does it do for the flower in return for the nectar? This should lead to a study of the hairy covering of the bee, and to a study of the manner in which the bee pollinates the pistil of one flower with the pollen brought from the stamens of some other flower. Then arises a most important question for discussion—Is there a mutual adaptation of bee and flower to promote this mutual service? In this connection, the pupil will observe that only insect-pollinated flowers are attractive and showy in appearance. They will also see that flowers possess the following adaptations for securing cross-pollination and for preventing self-pollination: (1) male and female organs are on different flowers, (2) male and female organs vary in length, (3) the male and female organs move independent of each other, (4) stamens and pistils mature at different times, (5) special structures are developed. It is not necessary that all of these points shall be made clear in this grade, as this line of work will receive more attention in each of the succeeding grades.

This study should be extended to the pear, peach, apple, strawberry and other flowers whose seed products are closely related to our welfare, until children shall see that it is to our interest to protect the bees and other helpful insects from harm.

From the study of (1) adaptation of plants to secure the light relation, (2) cross-pollination among flowers, (3) the life habits and the corresponding structure of birds, (4) the apparent adaptation of the insects already studied to secure their food, etc., the pupil should possess sufficient data to enable him to see that the form or structure of an organ is always well adapted to its function. The apperception of this law, in a very elementary way, and the accentuation of the helpfulness of plants and animals to man should be made the primary object of the work of this grade.

The work on inorganic matter and in general lines is discontinued here, as this work has been absorbed by other subjects.

SEVENTH GRADE.

ANIMAL LIFE.

Study ten more species of birds this year. In studying the various forms of animal life, we are concerned in discovering how they adapt

themselves in their struggle for existence, that we may proceed rationally in our efforts to aid or combat them, accordingly as they are helpful or harmful. This leads to the study of how each animal's structure and instincts are adapted to favor its existence in its natural environment. It is reasonable to expect that every pupil, by the time he reaches the seventh grade, will have seen that in an animal's struggle to exist, it must migrate, adapt itself, or become extinct. Have pupils observe and investigate how resident mammals, snakes, frogs, toads, etc., spend their winter, what changes occur during the four seasons in their habits, food or body covering that they may adapt themselves to the various physical conditions of their environment. What differences in size, color, food and general habits are found to exist between the animals of the field and those of the forest.

The adaptations of the following animals and others, if time permits, for securing food and warding off enemies might be worked out by observation: Mole, duck, cat, tomato worm, chipmunk. That this point may be rendered perfectly clear, the cat and mole may be used to illustrate briefly:

(a) The cat tribe chose to secure its food and defend itself against its enemies by creeping and springing; therefore its feet are cushioned that it may tread noiselessly; its claws are retractile that they may be kept sharp for grasping; it is fleet of foot, and very active; its teeth are sharp for tearing; its body is lithe and slender for springing. These adaptations would be useless unless it had also the instinct to use them. It is therefore fierce.

(b) The mole chose to secure its food by burrowing. Its forearm is adapted to a lateral movement; its paw is flattened for scraping; its snout is hardened for excavating; its fur is short so that it may move forward or backward without hindrance; its eyes are small and overhung with fur to protect them, for they are of no use under ground. In its instincts for securing food, it is gentle but persistent.

As many concrete illustrations as are consistent with the time allotted to this work should be worked out.

PLANT LIFE.

See directions for previous grades as to planting. Keeping in mind the economic value of trees, previously worked out, and the importance of developing a more thorough appreciation of our forests from an æsthetic point of view, we should seek to have pupils become familiar with ten species of common forest trees, not previously studied. These might be chosen—mulberry, birch, white oak, red oak, sycamore, elm, basswood, sugar maple, mountain ash, lynn. (See Apgar's "Trees of the Northern United States.")

Study ten or more plants with which the pupils are unacquainted. This series should represent a wide range of plant life. One could use these to advantage—umbrella-plant, watercress, cactus, pond lily, dewberry, mushroom, mistletoe. Study somewhat in detail the physical environment to which these plants have adapted themselves to live as to soil, moisture, temperature, exposure to wind, etc.

To illustrate—

(a) The cactus has adapted its life to arid regions. It has necessarily developed:

(1) A thick cuticle to protect the mesophyl from the extreme heat.

(2) A stem that has practically no leaves in order to reduce the surface exposure to a minimum, thereby checking the transpiration of water and more successfully resisting the bad effects of sand storms.

(3) Water reservoirs to sustain its life in times of extreme drought.

(4) A thick coating of spines to hold up from immediate contact with the body surface, the coating of ice which might form upon it at night.

(b) The pond lily has elected to live in water. To conform to this environment, it has developed—

(1) A thin cuticle to absorb water.

(2) A hollow stem throughout its entire length in order to supply the submerged portions with air.

(3) A root system which is poorly developed because the necessity for firmly grappling the soil does not exist.

These meagre suggestions should be expanded until the children comprehend the full significance of the structure of the plants studied.

Continue observations upon how the plants solve the problems of securing the light relation and cross-pollination. These two problems, which the great majority of plants solve, should be enriched by the observation of many individual plants which have not been specified heretofore. The data obtained from the study of plants and animals, if obtained in the manner above suggested, will enable the pupils to apperceive another of Nature's great laws; viz., when any plant or animal adopts a mode of life, it must accept all of the consequences incident to that life. A full comprehension of the universal applicability of this law will be of inestimable value to the pupils of this grade. In order that it may drop down into the individual life of each pupil, the teacher should apply the law, through their observations, to the life of man.

EIGHTH GRADE.

ANIMAL LIFE.

Continue observational work along the lines suggested for grades six and seven. Introduce as much new material as possible that the content of the following laws may be greatly enriched:

1. The form of an organ is always adapted to its function.

2. When a plant or an animal accepts a mode of life, it must accept all of the consequences incident to that life.

It is fair to presume that the pupils will have gained a tolerably clear conception of the following points:

1. Plants and animals must solve the problems consequent upon the mode of life which they have chosen, or for which they are adapted.

2. All life develops according to laws.

3. The earth is a living, working, changing mass.

With this general view of nature's processes, introduce five to ten or more new species of animals for study. This selection should comprehend some species which, through necessity or choice, have changed their mode of life. One might include in this study blind fishes, mole, bat, the American Indian. Study, both through observation and literature, the life history of these and other degenerated or modified animals to see how changes in mode of life have resulted in changes in the form of organs to suit their new life.

Study the influence of domestication upon the cat, cow, horse, and other tamed animals. Has this subjugation influenced the size, color, activity and instincts of the species? What has been the influence of reservation life upon the spiritual life of the Indians? The investigation of this point will give a good basis for the dynamic study of the history of the American Indian from the colonization period until the present. Trace the gradual modification of the following characteristics:

1. The Indian's spiritual attitude toward Nature and God.
2. The relation of his methods of warfare to his surroundings.
3. Ethical developments of home life. This will lead to a study of the personal life, habits and customs of the tribes.

If the study is carried into and includes the reservation life of those tribes which live almost entirely upon government bounty, it will be a good illustration of degeneration of spiritual life through quiescence, or inactivity.

It will be helpful for the children to see, in concluding the work on animal life, that intelligent men and women have appreciated the value of certain of our animal forms, and, to preserve them, they have organized humane and bird protection societies. Study briefly the aims of these societies, their methods of work and the results they have attained. Study the State laws and local ordinances with reference (1) to the importation and killing of birds, and (2) to fishing and hunting. The spirit and meaning of these suggestions should be adapted to the work with plants, also, in completing the year's work on plant life.

Without moralizing, have the pupil to reflect on what he has observed as to Nature's methods of working and as to what he knows about the relation of things in nature to his welfare. His duty, in light of what he has learned, as to obedience to laws and as to considering the welfare of humanity instead of indulging his own pleasure in the destruction or sparing of animal life, should be clear to him.

PLANT LIFE.

Continue planting, adapting suggestions to preceding grades along this line to the age, ability and interests of the pupils of this grade. Continue the study of the adaptations of plants for securing cross-fertilization and for preventing self-pollination along the lines suggested in sixth grade. Introduce the study of several new species of plants. Include in this list a few which, like the animals indicated above, have changed their mode of life. The life history of these might be worked out—dodder plant, mushroom, toadstool. Note the changes in structure that have resulted from adapting themselves to new conditions. To fully develop this point, it will be necessary to supplement direct observation largely by drawing upon

scientific literature which treats of the changes the pupil desires to trace. This meagre introduction to scientific literature will increase the pupil's insight into the breadth of the problems of science and suggest another means for aiding scientific research; viz., books on science. From the data obtained by these and other studies, the pupils will be able to apperceive another of nature's laws; viz., to maintain the integrity of an instinct or structure, the integrity of its function must be maintained.

What would be the effect upon a plant or an animal if the struggle for existence were removed and its life became all plain sailing? Introduce observational work on a few of the more common domesticated plants, as corn, peas, lettuce, beans. This work can be done best by rearing these plants. Plant three sets of seed—A, B and C.

A. Cultivate the seedlings with great care. Supply necessary moisture, food and protection from wind.

B. Cultivate the seedlings until they are three or four inches high, then abandon them to their own resources.

C. Cultivate the seedlings of this group until they are nearing the flowering stage, then cut away the upper third of the stock and allow the plant to make another effort, giving it the same attention as to moisture, food and protection from winds. Note the final results of the three series of experiments at about the same time.

As a basis for the more complete interpretation of these results, introduce some observational work on weeds. One might suggest burdock, wild carrot, wild lettuce, pokeweed. Plant three sets of seeds, a, b and c, and cultivate them as above directed. Note how the weeds, which apparently have no friends, have learned to devote all their strength to the one supreme purpose of the plant—the formation of seed. (See Burroughs' "Bunch of Herbs.") Contrast with these the inability of domesticated plants to succeed in the struggle against the weeds, and their enfeebled ability to change the orderly course of their development to suit the new conditions.

When the corn is two-thirds grown, if we cut off the upper third of the stock, it will probably die; at least, it will fail to produce its seed. Not so with the burdock. Cut off its central stem, and instead of attemping to reproduce it, it will send out a number of lateral flower bearing branches. Cut it off again, and it will abandon all central growth; but, to compensate for this, it will double the number of side branches which will bear seeds. Thus "it will not down."

These meagre suggestions should be expanded until they contrast strongly the effect of domestication (which means that the plants' battles for life have been fought largely by man) and independent growth.

From these studies the children will be able to appreciate another of Nature's laws; viz.: For a plant or an animal to maintain the integrity and vigor of its function, it must specificially and continuously overcome resistance to those functions.

The significance of these laws will be revivified when they are applied to the activities of the human species. What greater service can we ask from Nature Study than that it shall bring the iconoclastic boy of fourteen to an inner realization of these immutable laws:

1. When he adopts a mode of life, he will necessarily accept all the pain as well as the pleasure incident to that life. The bitter and the sweet

are bound in the same bundle. He will see that the pleasure of smoking will inevitably carry with it its penalties; e. g., loss of fine muscle coordination, and a tobacco heart.

2. If he accepts a life of ease, he must accept loss of power to do. He must inevitably become a quiescent parasite.

3. If he would be strong, he must overcome resistance through vigorous personal effort; for strength is only commensurate with the degree of the resistance which he masters. These laws are fundamental to his physical and spiritual life.

BIBLIOGRAPHY OF NATURE STUDY.

In the preparation of this report, much valuable aid has been received from books on Nature Study and Science and from published addresses and magazine articles on Nature Study and related topics to which access was had. The larger per cent. of these sources were helpful in that they suggested such spirit and subject matter as this report has sought to avoid, while the remainder were very helpful in a positive way.

The bibliography is classified under three general heads, as follows, with the thought that usage may be somewhat facilitated:

1. Mainly pedagogical and theoretical references in which are comprised discussions pertaining (1) to the pedagogical significance and value of Nature Study; (2) to the selection, arrangement and adaptation of nature material to public school conditions and aims, and (3) to the treatment of specific nature material in the recitation.

2. Mainly scientific and didactic references, comprising books and articles for the use of both pupils and teachers which supply accurate information concerning the phenomena of nature.

3. Mainly ideal literature and supplementary reading matter which may be used in connection with Nature Study. To this list should be added elections and poems based upon or inspired by nature from the writings of standard authors.

Each list is incomplete and the classification is more or less imperfect as everything in the bibliography has not been read carefully, and as some books and references mentioned are almost equally valuable from two standpoints. In such cases the classification made seems most accurate. No book nor article is mentioned in the bibliography which has not been examined and indorsed, at least in part, by some member of the committee.

Large space is purposely given to references, to the educational magazines printed in our own State and to the excellent educational magazine edited at Bloomington, Illinois, not necessarily because of the superior excellence of the articles they contain; but because it was thought these articles would be readily accessible to most teachers in Indiana. Doubtless many things of value have been omitted from this list of references, but any such omission is due to an oversight, a mistake in judgment, or ignorance.

Any of the books enumerated below which have been prescribed for the Indiana Young People's Reading Circle may be procured through the George F. Bass Co., Indianapolis, Indiana.

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"	August, 1897, p 503	Nature Work in the Grades	E. L. Hendricks	"
"	August, 1897, p. 518	Beauty in Art vs. Beauty in Nature	W. T. Harris	"
"	August, 1897, p. 538	Nature Study—the Morning Glory		"
"	May, 1897, p. 311	Easter Lilies		"
"	October, 1898, p. 621	Bird Study in Schools	Geo. L. Roberts	"
"	October, 1898, p. 630	A Suggestion for Bird Day		"
"	March, 1898, p. 151	What the Buds Can Tell Us	A. R. Northrop	"
"	March, 1899, p. 129	Nature Study—First Study	Henry G. Williams	"
"	March, 1899, p. 136	Buds		"
"	May, 1899, p. 225	What is Worth While in Nature	D. W. Dennis	"
"	April, 1899, p. 218	Nature Study		"
"	June, 1899, p. 334	Some Common Birds	A. M. Douglas	"
"	May, 1900, p. 201	Some Standpoints and Sources of Nature Study	E. B. Bryan	D. M. Geeting.
Inland Educator and Indiana School Journal	October, 1900, p. 116	Nature Study	M C. Jensen	Educator-Journal Co.
Journal of Education	April, 1898		Prof. Balliet	
Outlook	April, 1898		John Burroughs	The Outlook.
"	February, 1899, p. 326	Nature Study	"	"
"	July, 1901, p. 737	Nature Study and Its Influence	Margaret Morley	
Public School Journal	February, 1894, p. 330	A Bird	L. S. Daugherty	Public School Pub. Co.

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
Public School Journal	February, 1894, p. 335	The Hard Maple Tree	F. McMurry	Public School Pub. Co.
"	April, 1894, p. 462	Something About Song Birds	C. M. E	"
"	April, 1894, p. 466	A Plant	L. S. Daugherty	"
"	May, 1894, p. 514	A Fish	"	"
"	May, 1894, p. 530	Elementary Science	Luther Hatch	"
"	October, 1894, p. 88	My Pets at Home	Georgia Stenger	"
"	November, 1894, p. 150	Among the Pines	"	"
"	November, 1894, p. 154	Outline Showing Relation of Nature Study and Literature in First Grade	Lida McMurry	"
"	December, 1894, p. 208	Nature Study in First Grade	"	"
"	December, 1894, p. 211	Earth's Beautiful Dress	Georgia Stenger	"
"	December, 1894, p. 214	How Birds are Fitted for Protection During the Winter	Luther Hatch	"
"	February, 1895, p. 320	Nature Study in First Grade	Lida McMurry	"
"	January, 1895, p. 259	Nature Study	"	"
"	January, 1895, p. 262	In the Forest	Georgia Stenger	"
"	June, 1895, p. 253	Nature Study in First Grade	Lida McMurry	"
"	July, 1895, p. 602	Nature Study and Correlation	Wilbur Jackman	"
"	September, 1895, p. 23	Outline of Nature Study for September	"	"
"	November, 1896, p. 139	Caterpillars	Lida McMurry	"
"	November, 1896, p. 165	Science Topics for Autumn	Luther Hatch	"
"	April, 1896, p. 425	The Robins	Lida McMurry	
"	March, 1896, p. 374	The Screech Owl	Lida McMurry	"
"	February, 1896, p. 314	The Common Crow	"	"
"	January, 1896, p. 253	The Austrian Pine	"	"
"	March, 1897, p. 382	A Spring Device	H. P. Hay	"
"	May, 1897, p. 497	Nature Study	C. W. Hart	"
"	July, 1897, p. 605		Mrs. Salger	"
"	October, 1897, p. 84	Types in Nature Study	L. A. Hatch	"
"	October, 1897, p. 99	Why the Autumn Leaves are Colored	D. F. MacDougal	"
"	November, 1897, p. 131	November Bird Study	P. M. Silloway	"
"	December, 1897, p. 182	Midwinter Bird Neighbors	"	"
"	January, 1897, p. 253	A Few Remarks about Nature Study	Mrs. Twitchell	"
"	January, 1897, p. 259	Material for Nature Study	S. W. Black	"
"	October, 1897, p. 312	Covering of Birds	Luther Hatch	"
"	April, 1898, p. 421	Nature Study		"

Proceedings of N. E. A.	1894	Higher Use of Nature Studies	N. Cropsey	Irwin Shepard.
"	1894	Children's Love of Nature	Prof. Hoyt	"
"	1895, p. 570	Nature Study and Literature	S. L Arnold	"
"	1896, p 519	Place of Nature Study in Primary Work	Flora J. Cook	"
"	1896, p. 130	Nature Study and Moral Culture	David S. Jordan	"
"	1896, p. 139	Nature Study	O. S. Westcott	"
"	1896	Function of Nature in Elementary Education	M. J. Brumbraugh	"
"	1893, p. 598	Children's Gardens	J. B Merrill	"
"	1900, p. 494	Nature Study in Public Schools	D. Lange	"
"	1900, p. 524	Relation of Nature Study to Drawing in Public Schools	J. M. Stone	"
"	1900, p. 592	Relation of Advance Science to Nature Work	C. B. Wilson	"
"	1900, p. 600	Nature Study for Graded Schools	K. E. Dolbear	"
Report of the Committee of Ten	1894, p. 142	Nature Study for Grades of Schools below the High Schools	C. B. Scott	American Book Co.
Teachers' College Record	March, 1900, p. 1	Nature Study in the Horace Mann School	Elizabeth Carss	Columbia Univ. Press.
Seminary Pedagogical	December, 1899	Foundations of Nature Study	C F. Hodge	
Seminary Pedagogical	April, 1900	Foundations of Nature Study	"	
"	July, 1900	Foundatio s of Nature Study	"	
School & Home Education	May, 1899, p. 479	Nature Study in Lower Schools		Public School Pub. Co.
"	June, 1900, p. 498	Return of Spring	Mary Proudfoot	"
"	February, 1900, p. 304	Teaching of Botany	B. A. Sweet	"

MAINLY DIDACTIC AND SCIENTIFIC.

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
Aunt Martha's Corner Cupboard			Mary and Elizabeth Kirby	Educational Pub. Co.
All the Year Round			Strong	Ginn & Co.
Anthropology			E. B. Tylor	D. Appleton & Co.
Animal Memoirs			Samuel Lockwood	Ivison, Blakeman & Co.
A Year Among the Trees			Wilson Flagg	Educational Pub. Co.
Appleton's Home Reading Books			Various	D. Appleton & Co.
Animal Life in the Sea and on the Land			Sarah Cooper	American Book Co.
Apger's Trees of Northern U. S			Austin Aper	"
Alice and Tom			K L Brown	D. C. Heath & Co.
A Nature Calendar			T. E. Thompson	Morse Co.
Animal Life			Jordan and Kellogg	D. Appleton & Co.
About the Weather			Harrington	
Advanced Elementary Science			Howe	
Botany for Public Schools			Abbie Hall	Scott, Foresman & Co,
Birds of the U. S			A. C. Apger	American Book Co.
Bird Neighbors			N. Blanchan	Doubleday, McClure & Co.
Botany—Elementary			L. H. Bailey	Macmillan Co.
Birds and Bees, Sharp Eyes and Other Papers			John Burroughs	Houghton, Mifflin & Co.
Books of Nature			Dr. Hooker	American Book Co.
Birds That Hunt and Are Hunted			N. Blanchan	Doubleday, McClure & Co.
Bird Homes			Dugmore	"
Birds' Nests, Eggs and Egg Collecting			R. Kearton	Cassell & Co.
Beetles Butterflies, Moths and Other Insects			A. W. Kappel	"
Brids Through an Opera Glass			Chapman	
Birds of Village and Field			Merriam	Houghton, Mifflin & Co.
Brook and Bayou			Bayliss	
Bright Eyes			Gibson	
Bird Life			Chipman	

Carpenter's Geographical Reader			Frank Carpenter	Doubleday, McClure & Co.
Chapters on Plant Life			Sophie B. Herrick	"
Cornell Nature Study Publications			Various	Cornell University.
Concerning a Few Common Plants			Geo. L. Goodale	D. C. Heath & Co.
Citizen Bird			Mabel Wright	
Curious Homes and Their Tenants			Beard	
Dept. Agriculture Year Book	1897, p. 345	Birds That Injure Grain	F. E. L. Beale	Gov. Printing Office.
"	179 , p. 355	Lawns and Lawn Making	F Lamson and Scribner	"
"	1897, p. 637	Methods of Controlling Injurious Insects		"
"	1897, p. 641	Twenty-five Most Harmful Weeds		"
"	1897, p. 644	Trees Important in Forestry		"
"	1897, p. 670	Useful Birds and Harmful Birds		"
Descent of Man			Dr. Darwin	A. L. Burt, N. Y.
Twenty-four Educational Leaflets on Birds			Various	Society for Protection of Birds, 30 Hanover Sq., London, W.
Elementary Biology			E. R. Boyer	D. C. Heath & Co.
Elementary Physical Geography			R. S Tarr	Macmillan Co
Elements of Botany			Asa Gray	American Book Co.
Familiar Animals			John Montieth	"
Familiar Life in Field and Forest			Mathews	Ginn & Co.
Flowers and Their Friends			Margaret Morley	"
Flowers and Fruit			Jane H. Newell	"
Flash Lights on Nature			N. Blanchan	Doubleday, McClure & Co.
Fairyland and Science			Buckley	
Familiar Flowers			Mathews	
Familiar Trees and Their Leaves			"	
Familiar Features by the Roadside			"	
Geographical Nature Studies			F. O. Payne	American Book Co.
Garden Making			L. H. Bailey	Macmillan Co.
Gleanings from Nature			W. S. Blatchley	Nature Pub. Co.
Hours in My Garden			Japp	
How to Know the Wild Flowers			Dana	Scribners.
Home Studies in Nature			Mary Treat	American Book Co.
Habits, Food and Economic Value of American Toad	Hatch Sta., Amherst, Mass.		Kirkland	
Handbook of Nature Study			D. Lange	Macmillan Co.
In Nesting Time			Miller	

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
Indiana Geological Report	1897, pp. 515, 577	Birds of Indiana	Amos W. Butler	State Geologist.
Introduction to Zoology			Davenport and Davenport	Macmillin Co.
Indiana Geological Report	1899	A Catalogue of the Flowering Plants and of the Ferns and Their Allies, Indigenous to Indiana	S Coulter	W. L. Blatchley.
Insect Life			Comstock	
"			Weed	
Living Creatures of Water, Land and Air			John Montieth	American Book Co.
Little Wanderers			W. Morley	Ginn & Co.
Life Histories of American Insects			C. M. Weed	Macmillan Co.
38 Leaflets on Birds			Various	Society for Protection of Birds, 3 Hanover Square, London.
Laboratory Practice for Beginners in Botany			W. A. Setchell	Society for Protection of Birds, 3 Hanover Square, London.
Lessons in Zoology			Jas. G. Needham	American Book Co.
Little Brothers of the Air			Miller	
Little Flower People			Gertrude Hale	Ginn & Co.
Nature History			Wood	
Nature's Gardens			Dugmore	Doubleday, McClure & Co.
Natural History Series			Jas. Johonott	American Book Co.
Newell's Botany Outlines			Newell	Ginn & Co.
Nature Study			Wilbur Jackman	Henry Holt & Co.
Nature Study in Elementary Schools			Mrs. L. L. Wilson	Macmillian Co.
Nature Myth and Stories			T. J. Cook	"
Nature Study for Grammar Schools (Manual			Wilbur Jackman	"
Nature's Wonder Workrs			Kate Lovell	"
Nature Study in Elementary Schools (Reader)			Mrs. L. L. Wilson	
News from the Birds			Keyser	
Newell's Botany Readers	Parts 1 and 2		Newell	Ginn & Co.
Outdoor Stories			J. G. Needham	American Book Co.
Origin of Species			Dr. Darwin	A. L. Burt, N. Y.
Our Feathered Friends			Elizabeth and Jos. Grinnell.	D. C. Heath & Co.

Our Common Birds			C. F. Hodge	Press of O. B. Wood, Worcester, Mass.
Outlines for Primary and Kindergarten Classes			Cannell and Wise	E. L. Kellogg & Co.
Outlines in Nature Study and History			Annie Engell	Silver, Burdett & Co.
People of Other Lands			E. R. Shaw	American Book Co.
Popular Science Monthly	1896, p. 337	The Birds at Dinner		
"	1896, p. 179	Frogs and Their Uses		
"	1896, p. 124	Ants as the Guests of Plants		
"	October, 1897	Economic Value of Animals	C. F. Holder	
"	1896, p. 496	How Plants and Animals Spend the Winter		
"	November, 1897, p. 68	Burs and Beggar Ticks	Spencer Trotter	
"	February, 1898, p. 445	School Gardens	H. C. Clapp	
"	July, 1898, p. 339	Woodpeckers and Their Ways	W. E. Cram	
"	August, 1898, p. 443	Some Uses of Camera in Zoology	R. W. Shufeldt	
"	1899, p. 572	Some Poisonous Plants		
"	1899, p. 571	Birds as Pest Destroyers		
"	1900, p. 366	Winter Birds in a City Park		
"	1900, p. 393	Destruction of Birds		
Practical Zoology				
Plants			B. P. Colton	D. C. Heath & Co.
Plants and Their Children			J. M. Coulter	D. Appleton & Co.
Plant Studies			Mrs. Wm. Trana	Ginn & Co.
Purdue Nature Study			J. M. Coulter	D. Appleton & Co.
Readings in Nature Book			Various	Purdue University.
Seaside and Wayside Nature Readers			Swinton and Catheart	American Book Co.
Short Stories of Our Shy Neighbors			J. M. Wright	D. C. Heath & Co.
School Zoology			M. A. B. Kelly	American Book Co.
Stories of Insect Life			Margaretta Burnet	"
"			C. M. Weed	Ginn & Co.
Stories of Animal Life			Murtfeldt and Weed	"
Seed Dispersal			C. F. Holder	American Book Co.
Special Method in Science			W. J. Beal	Ginn & Co.
Steele's Popular Zoology			C. A. McMurry	Public School Pub. Co.
Story of the Birds			Steele and Jenks	N. Y. Chautauqua Press.
Story of the Fishes			Baskett	
Systematic Science Teaching			"	
Study of Leaves			Howe	
The World and Its People			Dennis	
The Oak and Violet			Various	Silver, Burdett & Co.
The Earth in Past Ages			Kate Douglas Wiggin	
The Food of Plants			S. B. Herrick	American Book Co.
The Earth and Its Story			A. P. Laurie	Macmillan Co.
The Foundations of Botany			Angelo Hilprin	Silver, Burdett & Co.
The Plant Baby and Its Friends			J. Y. Bergen	Ginn & Co.
The Footpath Way			K. L. Brown	Silver, Burdett & Co.
			Torrey	

MAINLY DIDACTIC AND SCIENTIFIC—Continued.

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
The Bird World			Fannie Eckstorm	D. C. Heath & Co.
The Great World's Farm			Gaye	
The Story of Bird Life			W. P. Pycraft	A. Wessels, N. Y.
Three Outdoor Papers			T. W. Higginson	Houghton, Mifflin & Co.
The Common Toad			C. F. Hodge	Press of O. B. Wood, Worcester, Mass.
U. S. Dept. of Agriculture Publications		Send for Catalogue of Bulletins and Circulars issued by the Department		Department of Agriculture.
Uncle Robert's Geography	6 vols		Francis Parker	
Wild Neighbors			Ingersoll	
Wild Nature Won by Kindness			Brightwen	
Zoology for High Schools and Colleges			A. S. Packard	Henry Holt & Co.

IDEAL LITERATURE AND SUPPLEMENTARY READING.

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
A Reader in Botany			Jane H. Newell	Ginn & Co.
Animal Life (Reader)			Florence Bass	D.C. Heath & Co.
Black Beauty			Anna Sewell	Educational Pub. Co.
Biography of a Grizzly			E S. Thompson	Scribner & Sons.
Boston Collection of Kindergarten Stories				J. L. Hammett & Co.
Buds, Stems and Roots			Annie Chase	Educational Pub. Co.
Cyr Readers			Ellen M. Cyr	Ginn & Co.
Child Life in Poetry			Whittier	Houghton, Mifflin & Co.
Child Life in Prose			"	"
Each and All			Jane Andrews	Ginn & Co.
Earth and Sky			J. H. Stickney	"
First Days in School			S. F. Stewart and Ida Coe	American Book Co.
From September to June with Nature			M. L. Warren	D. C. Heath & Co.
Five-cent Classics	Nos. 73, 74, 75, 76, 77, 78, 79, 87, 185, 196, 198, 20, 21, 103, 104, 105, 106, 108, 107, 92			Educational Pub. Co.
Glimpses of Nature for Little Folks			K. A. Griel	D. C. Heath & Co.
Heart of Oak Readers				"
In the Child's World			Emilie Poulsson	Milton Bradley Co.
In Story Land				
Indiana School Journal	August, 1894, p. 471	Story of Small Green Caterpillar and the Beautiful White Butterfly	Elizabeth Harrison	The Sigma Pub. Co.
"	August, 1894, p. 472	How the Leaves Came Down	Susan Coolidge	W. A. Bell.
"	August, 1894, p. 473	The Little Clouds		"
"	October, 1894, p. 608	Fall Fashions	Edith Thomas	"
"	September, 1894, p. 536	How Marigold Happened To Be	Susan Hartley	"
"	August, 1897, p. 517	Kindness to Animals	Chas. Roberts	"
"	September, 1897, p. 601	A June Day		"
"	October, 1897, p. 675	The Silkworm	Mary Howitt	"
"	October, 1897, p. 62	Arbor Day Program		"
"	July, 1897, p. 450	An Autumn Song		"
"	June, 1898, p. 639	The Seasons Game		"
"	June, 1898, p. 381	Indiana Corn	J. B. McCaskey	"
"	July, 1898, p. 443	Audubon 1		"
		Audubon 2		"

Name of Book.	Year or Vol. and Page.	Title of Article.	Author.	Publisher.
Indiana School Journal	August, 1898, p. 506	Audubon 3		W. A. Bell.
"	September, 1898, p. 580	Audubon 4		"
"	October, 1898, p. 641	The Bird's Petition		"
"	December, 1898, p. 783	The Devil's Race Horse		"
"	April, 1899, p. 211	Our Friends, the Birds		"
"	May, 1899, p. 2 4	Protection of Birds		"
"	May, 1899, p. 278	Memory Gems for Bird Day	Various	"
"	September, 1899, p. 570	Autumn Festival	Helen R. Rubb	"
"	October, 1899, p. 625	Arbor Day	"	"
Indiana Educator and Indiana School Journal	October, 1900, p. 135	Prog am for Arbor and Bird Day	Chas. McCurry	"
Leaves and Flowers			Mary A. Spear	D. C. Heath & Co.
Little Nature Studies (Readers)			John Burroughs	Ginn & Co.
My Saturday Bird Class			Margaret Miller	D. C. Heath & Co.
Nature in Verse			Mary I. Lovejoy	Silver, Burdett & Co.
Nature			R. W. Emerson	Maynard, Merrill & Co.
Oriole Stories			M. A. L. Lane	Ginn & Co.
Poetry of the Seasons			Mary I. Lovejoy	Silver, Burdett & Co.
Popular Science Reader			Jas. Monteith	American Book Co.
Pets and Companions			J. H. Stickney	Ginn & Co.
Plant Life Reader			Florence Bass	D. C. Heath & Co.
Public School Journal	May, 1884, p. 511	The Little Pine Tree	Lida McMurry	Public School Pub. Co.
"	May, 1894, p. 543	Dandelion	Francis Weed	"
"	July, 1894, p. 625	The Conceited Apple Branch	Lida McMurry	"
"	September, 1894, p. 19	The Pea Blossom and Memory Gems	"	"
"	September, 1894, p. 22	The Lonely Pine Tree	Emma Graves	"
"	October, 1894, p. 79	The Bird with No Name	Lida McMurry	"
"	June, 1895, p. 55	The Flying Grasshopper	Emma Graves	"
"	October, 1895, p. 102	The Bee		"
"	June, 1896, p. 547	The English Sparrow	Lida McMurry	"
"	June, 1896, p. 607	The Wild Rose	"	"
"	July, 1896, p. 613	In June	Anna Willis	"
"	June, 1897, p. 548	The Stork and the Fisherman	Chas. Myall	"
"	July, 1897, p. 587	June in Contrast	Lowell and Riley	"
"	September, 1897, p. 4	September	Kate Brown	"
"	May, 1898, p. 463	Queen May and Her Flowers	Various	"
"	May, 1898, p. 467	Spring Flowers	Phoebe Cary	"
"	May, 1898, p. 478	A Wee Traveler	Elizabeth Nunemacher	"

Public School Journal	May, 1898, p. 478	The Story of the Coal	Howard Dickenson	Public School Pub. Co.
"	June, 1898, p. 525	Sweet May	Helen H. Jackson	"
"	June, 1998, p. 525	June	E. C. H	"
"	July, 1898, p. 589	Where They Come From		"
Round the Year in Myth and Song			Florence Holbrook	
Robinson Crusoe for Boys and Girls			McMurry and Husted	"
Stepping Stones to Literature Series			Arnold and Gilbert	Silver, Burdett & Co.
Sprague's Primmer			Sarah Sprague	Rand, McNally & Co.
Seed Babies			Margaret Morley	Ginn & Co.
Stories and Poems for Children			Thaxter	
Stories Mother Nature Told			Jane Andrews	"
Stories of My Four Friends			"	"
Seven Little Sisters			"	"
Story of Sandhill Stag			E. S. Thompson	Chas. Scribner Sons.
School and Home Education	November, 1898, p. 135	Science Lessons After Dissemination of Seeds	Emma Lee	Public School Pub. Co.
"	April, 1899, p. 417	The Coal Story		"
"	April, 1899, p. 427	The Song of Spring	Felix Leigh	"
"	April, 1900, p. 414	Robbin		"
"	June, 1900, p. 509	In the Heart of the Woods	Margaret Sangster	"
"	June, 1900, p. 513	One Lesson	Kathleen M. Ross	"
The Baldwin Readers			Jas. Baldwin	American Book Co.
The Kentucky Cardinal			Jas. Lane Allen	
Wilderness Ways			Wm. J. Long	Ginn & Co.
Ways of Wood Folk			"	"
Wild Animals I Have Known			Ernest Seton-Thompson	Scribners.

This report on a course of instruction in the subject of Nature Study, comprising a brief discussion of the principles underlying the subject, a formal assignment of work by grades and a bibliography of Nature Study, is hereby submitted.

H. B. WILSON,
Chairman;
SHERMAN L. DAVIS,
L. E. WHEELER,
Committee.

POEMS, SONGS AND STORIES FOR USE IN THE PRIMARY GRADE.

FALL WORK.

Poems—

September Hymn.—Sarah L. Arnold.
October's Bright Blue Weather.—Helen Hunt Jackson.
The Little Brown Leaf.—Mrs. Margaret E. Sangster.
Down to Sleep.—Helen Hunt Jackson.
November.—Alice Carey.
Fly Away Little Birds.—Selected.
The Toad's Good-By to the Children.—From Nature in Verse.
Talking in Their Sleep.—Edith M. Thomas.
The Flight of the Birds.—H. McE. Kimball.
The Chestnut Burr.—Selected.
How the Leaves Came Down.—Susan Coolidge.
Fall.—Maud L. Betts.
October.—Mary N. Prescott.
Golden Rod.—Mrs. F. J. Lovejoy, in Nature in Verse
The Ripened Leaves.—Margaret E. Sangster.
Late Autumn.—Selected.
September.—Helen Hunt Jackson.
The Acorn.—Harper's Second Reader.
The Pretty Red Squirrel.—Selected.
The Merry Squirrel.—Selected.
The Leaves' Farewell Party.—Elizabeth J. Gray.
The Squirrel's Arithmetic.—Nature in Verse.
Friends.—L. G. Warner, Songs of the Tree-Top and Meadow.

Songs—

Good-By to Summer; Dainty Milkweed Babies.—Eleanor Smith's Songs for Little Children, 2.
The Leaves' Party; Harvest of Squirrel and Honey Bee; Farewell to the Birds; Jack Frost; Thanksgiving Song.—Songs of the Child World, Gaynor.
Jack Frost.—Eleanor Smith's Primer.
Flowers' Lullaby.—Songs and Stories for Kindergarten, by Mildred and Patty Hill.
Come Little Leaves.—Eleanor Smith's Songs for Little Children, 2.

Stories—

Anxious Leaf.—Henry Ward Beecher.
Coming and Going.—Henry Ward Beecher.
The Green Worm.—Cat Tails and Other Tales.
The Maple Leaf and Violet; The Story Hour.—Kate Douglass Wiggin.
The Kind Old Oak.—Little Flower Folks.
The Little Maple Leaves.—Cat Tails and Other Tales.

WINTER WORK.

Poems—

Where Are the Flowers.—Selected.
Winter Prayer.—Selected.
To Sleep.—Selected.
Nurse Winter.—Susan Coolidge.
Under the Snow.—Christian Register.
The Fairy Artist.—Selected.
Winter.—Plan Book for December.
Asleep in the Snow.—Child Garden.
The North Wind's Song.—Child Garden.
Snow Flakes.—From the Kindergarten.
The Night Workman.—Agnes S. Cook.
Jack Frost.—Nature in Verse.

Songs—

Snow Flakes; Sleighing Song; Tracks in the Snow.—Songs of the Child World, Gaynor.

Stories—

The North Wind at Play.—In the Child World, by Emilie Poulsson.
What Broke the China Pitcher.—Cat Tails and Other Tales.
A Story for Willie Winkle; The Snow Flakes, Anderson.—Kindergarten Stories and Morning Talks, by Sarah E. Wiltse.

SPRING WORK.

Poems—

Waiting to Grow.—Frank French.
A Song of Spring.—Helen C. Bacon, Nature in Verse.
A Laughing Chorus.—Selected.
The Pussy Willow.
The Blue Bell.
The Sunshine's Caress.—Miss Jenk's Songs and Games for Little Ones.
Calling the Violets.—Lucy Larcom.
May.—R. M. Alden.
Leaflets.—Kate L. Brown.
A Tired Little Worm.—From Primary Education.
Calling Them.—Selected.
Bright Little Dandelion.—From Songs of the Tree-Top and Meadow.
Waking Up.—Educational Journal.
Spring Rain.—Florence E. W. French.
The Cherry Blossom.—Leaves and Flowers.
March.—Lucy Larcom.

March.—Primary Education.
The Wind.—Robert Louis Stevenson.
In the Snowing and the Blowing.—Selected.
An April Welcome.—Phoebe Cary.
The Child's World.—Matthew Brown.
Lilliput Lectures.—Plan Book.
Raindrops.—S. Alice Smith.
The Rain Coach.—Eleanor Smith's Songs for Little Children.
Dandelion.—George Cooper.
The Little Plant.—Kate L. Brown.
Cradles; Pussy Willows, Mary E. Plummer.—Songs of the Tree-Top and Meadow.

Songs—
Rain Song.—Eleanor Smith's Songs for Little Children.
Pit-a-Pat; Robin Red Breast; Little Yellow Dandelion; The Bird's Nest. —Songs of the Child World, Gaynor.
The Reason Why.—Eleanor Smith's Primer.
Awake Says the Sunshine; All the Birds Have Come Again.—Eleanor Smith's Songs for Little Children.
The Walking Flowers.—Songs and Stories for the Kindergarten, Mildred and Patty Hill.

Stories—
A Little Morning Glory Seed.—Plan Book for May.
More About the Green Worm.—Cat Tails and Other Tales.
Five Peas in a Pod.—Anderson.
Story of a Morning Glory Seed.—Little Flower Folks.
The Apple Branch.—Anderson, in Classic Stories for Little Ones, McMurry.
How West Wind Helped Dandelion.—In the Child's World.

If I were asked to name the books that would give the most help in this direction, I should say: "The Primary Plan Books," published by A. Flannagan, of Chicago; "Nature in Verse," Lovejoy; "Songs of the Tree-Top and Meadow," "Songs and Stories for the Kindergarten," Mildred and Patty Hill; "Songs of the Child World,' 'Gaynor; "Songs for Little Children," 1 and 2, Eleanor Smith; "In the Child World," Emile Poulsson.

Respectfully,

FLORENCE BASS.

By request of the Committee, Miss Florence Bass, of the Indianapolis Schools, prepared the foregoing list of poems, songs and stories which she has found to be suitable for use in connection with Nature Study in the primary grades. The committee considers this work a valuable contribution to the report, as it puts in a concrete way the inter-relation of Nature Study and some of the other lines of school work.

To the wise counsel of Superintendent W. H. Glascock, Bloomington, this report is indebted for some valuable features, and the chairman of this committee desires to acknowledge his appreciation of this helpful service.

H. B. WILSON,
Chairman.

6. What Shall Be Indiana's Next Steps In Educational Progress?

A SYMPOSIUM. (SIX PARTS.)

I. IN IDEALS AND PROCESSES.

By Howard Sandison, Professor Mental Science and Methods, State Normal School.

The race, in its development, has created a series of fundamental ideals. These are ideals concerning the relation of the individual to the institutions. Educational ideals rest ultimately in these fundamental conceptions of the relation of the individual to the organized institutions of society.

1. The Ideal of Information.

The first ideal held that the schools should give the child information. This information was to be conferred for the sake of the institution. The doctrine was that the person and the institution were different, but that having been born into the institution he belonged to it. The purposes and perpetuity of the institution were conceived of as the only things of enduring importance. In this ideal the notion is implicit that the independence of the child should be "cribbed, cabined, and confined" in order to form him into a subject who would servilely and with resignation aid in perpetuating the institution. This is the ideal under which every form of tyranny flourishes. It is abstract or partial in that it ignores the doctrine that it is the destiny of the individual to possess that degree of free will which enables him to will the freedom of the institutions and hence of himself and every other person equally. This ideal attributed freedom to the institution only.

(a) Under this conception, the process of education is one of moulding and not, as it should be, one of developing the essential individuality of the pupil. Memorizing is always the predominating activity under such an ideal.

(1) Indiana is not strongly controlled by the Ideal of Information; not pre-eminently influenced by the thought that knowledge is to be given to the child in order that he may serve the institution in its existing form. Still, just as snow, in the closing days of winter, lies in isolated patches in the lower portions of the surface where it is untouched by the sun, so this notion, and its resulting process are active here and there over the State untouched by the influence of higher ideals.

2. The Ideal of Culture.

The second ideal exalted the individual and sought to give him culture. This culture was to be given for the individual's own benefit. His sub-

jectivity was emphasized. Culture having as its end the advantage of the individual only, would tend to become as selfish as appetite though not so gross.

The Ideal of Culture has had two aspects—

a. The first stage in the growth of the Ideal of Culture held the child to be good by nature. The institutions were thought to be artificial and non-essential. The individual was believed to be naturally free and good until hampered and contaminated by society. This ideal emphasizes the importance of the individual as an isolated atom. It involves the notion that a person entering the institutions in order to gain advantages from combination, is deprived of essential rights. The truest condition of life is conceived to be that in which the person is most free from institutional influences. Law is regarded as bondage. Caprice, whim and impulse are as highly esteemed as rational thought because they are held to be as natural. In the period of this ideal "The noble red man of the forest" was the type of freedom. Of this new dispensation, the brilliant but erratic Rousseau was prophet and priest, and "Emile," his celebrated educational work, sets forth the process corresponding to the theory that the institutions are artificial inherently. This ideal is abstract or partial in that it ignores the individual's essential membersihp as a subordinate conscious center in the institutions of organized society. Giving validity to the isolated person only, it denies substantial worth to the institutions, and fails to identify them with the capacity of the individual to will the freedom of all. This ideal has in it the germ of anarchy, and unless closely guarded produces a conceited individualism.

(a) Under this conception the process of education is controlled too largely by the child's existing condition and whim. The teacher endeavors to be led by the child. This notion has a degree of validity, undoubtedly, but unlimited, it sanctions a process which induces the child to seek a freedom which is outside of the structure of rational institutions and alien to them. The trend of the process is to foster innocent naive goodness rather than goodness rising out of negation and conflict.

(1) Indiana does not have as a prevailing ideal the notion that the institutions of organized society are essentially a detriment to independence.

Nor is the kindred process—namely, the process which stimulates the child's sense of his individual independence, and which cherishes the notion that the institutions are artificial, restrictive, and conventional—strongly manifest; yet the educational activity of the State, shows remaining traces of both ideal and process.

b. The second stage in the growth of the Ideal of Culture held to three things:

(1) That the child is defective by nature.

(2) That he is potentially harmonious with the institutions.

(3) That this harmony can be reached without conflict.

In this stage, the institution is not the all in all as is the case in the Ideal of Information. The individual is not conceived to possess a freedom outside of the institutions, and the institutions to be abitrary and artificial as is the case in the first stage of the Ideal of Culture. The child is conceived as actually a mere member of society and potentially all that society involves. The institutions are thought of as the substan-

tial, rational objectification of the child's inherent needs. But there is an additional and a very significant element. This is the notion that the development of the child, from the condition of being a mere member, to the higher state in which he embodies in his individual life the whole of the institution, occurs without conflict. To find this to be true would be surprising, however, because the gulf between the child and the institution is very wide. The cultivated, civilized individual is practically at one with organized society.

Nevertheless in this second aspect of The Ideal of Culture the process of passing from a life governed by impulse to one of civilization is conceived to be as serene, as free from the strife of opposing forces, as the growth of a flower seems to be. By a happy, imperceptible transition the child is supposed to become logical, ethical and artistic.

(1) There is a recognition that the child actually wills selfish ends.

(2) There is a belief that it belongs to him potentially to will the freedom of all.

(3) There is also an identification of the person who wills the freedom of all with the institution, because it is conceived to be just the function of the institution to bring free will to every one. These three are great insights. There is, however, in this second stage of the Ideal of Culture an important defect. This defect is a failure to recognize adequately the fact that each individual is inherently a contradiction of the tendency to will selfish ends and the tendency to labor for an improved condition of all. Since this fact is not duly emphasized, there is a failure to apprehend clearly that the growth beyond this inclination to be controlled by selfish purposes is at first through inhibition. It is said to be through inhibition because the positive habit of willing the good of each person indirectly, through choosing the improvement of organized society, is preceded by the negative process of cancelling the inclination to will the freedom of the individual self only.

(a) The process seems to have pleasure as its center in that subjects and aspects of subjects that are interesting are the ones strongly dwelt upon.

The activity sought is attention through immediate, spontaneous interest. This hedonistic tinge appears in that the child is to be permitted to grow without inhibition as is supposed to be the case with the flower. He is not to be commanded, blamed, or induced to consider the reasons for his actions. When by his own undisturbed growth he becomes reflective, then only is he to be asked to reflect. If, in a lesson on a plant, the teacher desires the child to concentrate his attention on the root and learn the various attributes of it in order, and then wishes him to consider successively in an orderly process the stem, leaf, flower and fruit, these desires must not prevail if the child's inclination is to notice first the flower or the leaf, to speak of a picture of a leaf, to tell of a flower at home or to dwell upon whatever suggests itself; for according to the second stage of the Ideal of Culture, to curb inclination instead of satisfying it is a detriment. The strength of this process is that it recognizes the present condition of the child to be defective or limited, and the goal to be a person who invariably wills only that freedom which pertains to all. Its weakness is that it is too exclusively a mere supplying of interesting material for thought without sufficient attention to inhibition as the

second or intermediate step in education. The product may prove to be a self-indulgent individual.

(1) One does not find the process of education in the state to be strongly characterized by a study of the child for the purpose of apprehending his present impulses and interests so that a culture of these may be devised which is only pleasant and positive, lacking the negative training of inhibition. Yet in isolated schools, here and there, constituting in the aggregate no inconsiderable number, this ideal and this process prevail, giving in the schools so characterized too strong a tinge of sentimentalism.

3. The Ideal of Indirect Culture.

The present shows indications of a third ideal—the only one fully worthy of man, and of modern education. This is the ideal which regards:

a. Free will itself to be the only truly universal content of choice.

b. The institutions to be objectified personalities or actualized will, since each institution is not only a product of will, but is also an existence exerting its will upon the people.

c. Increase in the efficiency of the institutions to be the most effective, the most universal form of bringing freedom to each citizen.

A person may will freedom by discovering a defect in himself and removing it; he may establish free-will in a more extended sense by also putting forth individual efforts to elevate the standard of life in all coming within the range of his influence, but according to the third ideal, the most nearly universal form of willing freedom, is that mode of activity which increases the efficiency of the institutions, because only the institutions will universally and impartially the freedom of each and of all. The institutions not only will that each individual shall exhibit free will, but they even compel it. This conception—that the individual gives knowledge and culture to himself in order to render the institutions more nearly perfect and hence better equipped to stimulate or if necessary to compel free will in every member is the Ideal of Indirect Culture. It implies the notion that the individual is not only in the institution, but that the essential activity of the institution reflects each person's true individuality.

What is true independence? It is just that freedom which reveals both the child's rationality and the essential structure of the institution.

The assumption is that each institution is "of the individual, by the individual and for the individual." It is of him because it reflects capacities that are potentially his. It is by him because the institution arises through the will-process of the individual. It is for him because its aim is to make actual in the individual's life the higher and more enduring process, which the institution itself exhibits. All this implies that the institutions are the child's larger, more ideal, more permanent self, and that the only enduring freedom is that which reinforces and is in turn reinforced by them. This ideal being the conception of the child as actually a mere member of society, but potentially all that the race has been or may be, implies what is probably one of the deepest truths of education—that the uneducated individual reveals inherently a distinct self-opposition. Actually he is a being who chooses limited or capricious ends, while possessing the ability to know and to choose free will itself in each and in all. The presence in man of the ability to know and to choose free will itself for himself and others alike, through the institutions, is

the great doctrine of Socrates. It has been justly characterized as the greatest thought ever wrought out by man. The Sophists had said "My thought is the criterion of truth," but the great seer of the Greeks replied "Not your thought, but your thought is the criterion." The tendency to make free will the content of choice is the eternal element of man. Dante had a conception of this as shown by his saying to Brunetto, "You have taught me how to make my life eternal." (Inferno, Canto XV, lines 84-85.)

This notion of man as able to make free-will itself the sole object of thought and effort reveals him as possessing innately the negative element because he must cancel his tendency to choose selfish ends in order to make free will alone the content of choice. This negation, being innate in the human being, is found likewise in the process of educating him. The aspects of the process may be expressed thus:

(1) The condition of the person to be educated is at first particular. That is, he chooses ends more limited than free-will itself. The contradictions involved in this capricious state are implicit.

(2) Then the contradictions become explicit in that he rises to a knowledge of his ignorance and caprice, and of their negative character.

(3) Gradually, the habit of choosing inadequate ends is changed into the habit of selecting freedom as the only sufficient end. This is the ideal of the process in modern education. Being the form of man's spiritual process, it is therefore the mould of the child's process of learning any object or truth.

Let this process be illustrated with intellectual, artistic and ethical material:

1. The Intellectual.

It may be assumed, for example, that the child is to become acquainted with the nature of the relative pronoun.

a. He first becomes aware of it as a whole in its use in the sentence; as, the general who finally organized the armies was very skillful. At this stage all the close distinctions, all the specific distinctions and all the examples of the class typified by this one word who are indistinct or subconscious.

b. The second movement in the process of knowing the relative pronoun is to apprehend its distinctions clearly, considering each element as isolated or independent.

(1) The act of separation always begins with the most comprehensive, that is with the fundamental distinction. This gives the analysis into meaning and form.

(2) The separative act continues in the process of distinguishing the meaning into object and connection.

(3) The act of distinction is manifested also in discovering the differences in form—who, whose, whom, and their differences in significance.

(4) This second movement—the analytic—is still further exhibited in the process of discovering all the different words characterized by expressing a substantive idea and the idea of connection.

These distinctions are the negative features, for the term negative denotes any characteristic held in isolation or in independence. No characteristic is, in fact, isolated or independent.

c. Therefore, in the process of knowing the relative pronoun, the child

is, in a final movement, to apprehend all the elements of both form and meaning as unified in the characteristic function of the relative pronoun —to express an object in a given relation as identical with an object in another relation, without naming the object. In the given example, the word who expresses the identity of the object putting forth the act of organizing with the object revealing skill, without naming the object. The characteristic of not naming is to be seen as subsuming all the other characteristics. This is a mediated unity—the unity always sought by education.

In this unity the distinctions have not disappeared. They are still clearly apprehended. In the first unity the distinctions had not yet arisen. Hence it was a fused unity.

2. The Artistic.

Let the example in this case be that of gaining a knowledge and an appreciation of a painting.

a. The learner first knows it as a somewhat fused unity. In this phase of the process, the distinctions, or negative aspects, are implicit.

b. The second movement is that in which the learner becomes distinctly conscious of the various elements of the painting. They stand out as isolated, as independent to a degree. For example, in the Sistine Madonna, the elements of distinction are, mainly, Pope Sixtus, the Tiara, St. Barbara, The Cherubim, the Child, the Madonna, the Clouds, the arrangement of the drapery, etc. In so far as they are isolated they constitute the painting in a negative aspect. They are negative because, viewed as different, as isolated, they are destructive of the artistic unity of the painting. Whenever in the study of an object or of a branch of study the process concludes with the act of analyzing or distinguishing the object or the branch of study into its constituent elements, the negative aspect is exhibited.

c. Therefore in order to render the work on the Sistine Madonna positive, the process must include a phase of investigation which will reveal to the student the unity of the apparently alien elements by making evident how each element is harmonized with each and all of the others by contributing to the accomplishment of the common purpose.

3. The Ethical.

This will be illustrated by growth into truth-telling and by growth into obedience:

a. To a pupil, the act of misrepresenting his standing in a subject seems at first to contain for him mainly the good. The evil or negative elements are practically implicit.

b. The phase which next arises is one that will free the pupil's condition from its implicit elements. To accomplish this the teacher leads him to distinguish:

(1) His act itself from its results.

(2) The results into the intended and the unintended consequences.

(3) The unintended consequences into those that could have been known by close thinking and those that were beyond the grasp of his power of thought.

The process of making these distinctions, and the distinctions themselves are negative, because anything considered as isolated, as out of relation to the function of the whole, is negative. As the pupil's knowl-

edge becomes clear concerning each set of consequences a feeling of responsibility for it arises. Since the results appear as detrimental, the child tends to render such acts and their consequences negative by inhibition; but inhibition is in itself negative. The man who left the swept and garnished room, without entering upon any positive work, merely prepared conditions for the entrance of new and greater evils (Matthew XII, 43-45).

The pupil is, in the third place, to enter upon a positive process. He must gain a knowledge of the nature and the value of the intended and the unintended consequences of the opposite kind of act.

This knowledge of the positive ethical act—truth-telling—together with the performance of it until it becomes a habit and thus sinks into instinctive feeling, constitutes the concluding aspect of ethical training.

The process of training into true obedience is similar. It is a transition:

a. From a spontaneous obedience in which the tendency to disobedience is implicit.

b. Through a negative phase consisting, successively, of a doubt of the advisability of obedience; a tendency to disobedience; actual disobedience; the pain resulting from disobedience; the recoil from this pain; obedience to external authority (all being negative).

c. Into a positive form of obedience—obedience to the inner rational behest of the one who obeys. This is self-obedience or self-government.

The educational advance in ideals and processes here advocated would constitute a progress from two ideals and corresponding processes into a third. Each of the first two ideals exhibits inadequately the nature of the child.

The first—the Ideal of Information—counsels the conferring of that knowledge which will equip the individual to support and perpetuate the existing institution in its existing form. It exalts the institution.

The second—the Ideal of Culture—sanctions the acquiring of culture training, refinement, etc., in order that the individual may be more, to and for himself. It exalts the individual.

The third—the Ideal of Indirect Culture—is a unity of both the first and the second.

It sanctions knowledge, culture and refinement in the individual, but not for the institution, for that would be a fused unity—a fusion of the interests of the individual with those of the institution; not for the individual, for that would be an isolation, a negation which would constitute a selfish egoism. It is rather for a constant and growing process. Knowledge and discipline in the individual are objectified in the institution as actualized will. The institution then acts upon the individual, guiding or compelling him into higher ranges of freedom. The individual being possessed of greater freedom is impelled to react upon the institution, elevating it through his higher freedom. This is the continuous process, and the Ideal of Indirect Culture does not hold knowledge and skill to exist ultimately for any one factor in the entire process. The third ideal is adequate, therefore, because it regards the total structure of the self and a corresponding process—the process involving differentiation as its second aspect. Holding that each individual is actually finite, but potentiatlly infinite, it identifies the infinite element with the established habit

of choosing free will, and the finite with the habit of choosing limited ends, as, money power, etc. Such ends as supreme, are negative, capricious. Moreover, this third ideal recognizes the inherent contradiction in the individual, and the reflection of this contradiction in the objective world. The process therefore implies struggle and renunciation as desirable educative forces. It is one in which the child's self-activity is stimulated both negatively and positively. Negatively he increases his self-activity by renouncing his pride, envy, anger, indolence, cupidity, and sensuousness. Positively he increases it by choosing acts that reinforce each institution and hence himself and every other individual.

The first ideal is in itself an example of a unity lacking differentiation.

The second is an example of isolation or negation.

The third requires a beginning that lacks differentiation; a passage out of this into clear distinction or negation; a rise out of negation into organized unity. It thus includes and transcends both the first and second.

II. REFORMS.

By Amos W. Butler, Secretary Board of State Charities, Indianapolis.

Education is training for social co-ordination. The untrained form the bulk of the anti-social class. This class is a menace to society in one or more of many ways. Unlettered, untrained, unskilled, these persons are notably defective and are the cause of many social evils, culminating in pauperism, imbecility and crime. Whatever, then, corrects these evils, turns from a downward course those who have entered thereon, and is preventive; is helpful.

In this work the school is the greatest factor, and such it must continue to be until the home does its proper work. I have no word of censure for our educational system. That it has its defects, we all agree. That its administration has faults, we all know. Perhaps it is as good as we can hope for at this time. The effort of the hour is, as it should be, for advancement. Standing where we are today, we should look forward and upward.

A few Sundays ago I sat upon the platform in the chapel of one of the great reformatories of this country. A gentleman who has had over half a century of experience in the care and reformation of offenders, spoke. As he looked into the faces of the nine hundred boys and young men between the ages of sixteen and thirty who were before him, he began by asking this question: "Why are you here?" They did not reply to him. Could they have answered, it would have been in the language that the records have spoken to me. Recently, for a special purpose, a short study was made of certain points regarding the last five hundred inmates received at the Indiana Reformatory at Jeffersonville up to and including May 31, 1901. The facts brought out verify in a striking way those of previous investigations.

It is generally recognized that the family relations of a majority of the inmates of such institutions have been disturbed. The largest proportion are notably deficient in education. Of the 500 studied, 66, or 13.2 per cent.,

are reported as illiterate; 251, or 50.2 per cent., had not reached the fourth grade in the public schools, and but 26, or 5.2 per cent., had reached the high school. Two hundred and eighty-two of all noted were natives of Indiana. The proportion of illiteracy was less in these by almost one-half, and a greater number had passed the elementary school work. To be more specific, of these last mentioned, 22, or 7.8 per cent., were illiterate; 123, or 43.6 per cent., had not reached the fourth public school grade; only 13, or 4.6 per cent., had reached the high school.

The stooping shoulders, awkward arms and shambling gait of these young men indicate plainly that they are deficient in physical training. The training of the hand has been neglected. Four hundred and six, or 81.2 per cent., claim to have no trades. In these busy times when there is a demand for workmen, 242, or 50.4 per cent., state they were unemployed when the crime for which they were sentenced was committed.

Not one claims to have been under the influence of good associates. Evil associates lead to bad habits. While it is not claimed that those shown were the cause of crime, it is interesting to note their relationship to it. Three hundred and twelve, or 62.4 per cent., use liquor; 374, or 74.8 per cent., smoke cigarettes; 409, or 81.8 per cent., use tobacco in some form. On the contrary it is shown that they have not been to any very great extent under those influences which are considered refining and helpful. Many have been deprived of proper home influences. Two hundred and eighty-six, or 57.2 per cent., have not attended Sunday-school; only one of the 500 examined claimed to have belonged to the Y. M. C. A.

It should be stated here that no value is claimed for some of these latter figures. I do not know that it will be shown that they have any value. They are simply taken for purposes of experiment in order that they may be tested.

The offenses committed by these 500 persons may be classified as crimes against person and crimes against property. It will be observed that 88 per cent., 440, of them fall under the latter class, leaving 12 per cent., or 60, under the former.

The 500 boys present at the Indiana Reform School at Plainfield, on October 26, 1901, gave the following statement: Two were eight years of age, 5 were nine, 23 were seventeen, 9 were eighteen, 11 were nineteen, 2 were twenty years old. In other words, 466, almost 90 per cent., were between the ages of ten and sixteen years. These boys claimed their school record, when they were admitted, was as follows: Two hundred and seventy-eight, or 53.6 per cent., were illiterate; over 93 per cent. had not reached beyond the fourth grade in the public schools; but 6 of these boys had reached beyond the fifth grade, and none beyond the sixth. Four hundred and eighty-four, or 93.4 per cent., reported their associations as bad or mixed. But 34, or 6.6 per cent., claimed to have associated with good company. In the case of 191 boys, the parents are reported as living together; that leaves 327, or 63.1 per cent., whose homes have been disturbed.

It has been my lot the last few years to stand amid the downtrodden and the fallen; to see the kind of grist that passes through life's mill and what is cast aside as poor and worthless. A few years ago, the conclusion was reached by some intelligent observers that these boys and girls, men and women, who are cast up by the waves of the sea of life

as wreckage upon the shore were not worthless; that something might be done with them. From that time to this intelligent study has been given to these unfortunates in some of our States. Proper accommodations have been afforded and increased facilities have been provided, in order that they might be trained.

The greatest institution that has taken this work in hand, and it is the greatest institution in the world for reclaiming young men, is the New York State Reformatory at Elmira. It has had a continuous history of more than twenty-five years. All this time, it has been under the directing hand of one man, who has built it and fashioned it as he would. Wisely he set out to study the problem before him. He observed that there were many things lacking in these young men. They were stoop-shouldered, hollow-chested, crooked-backed; had awkward legs. They lacked physical training; they were unable to direct their hands or feet or minds. They lacked self-control. They lacked home training; in more than half the cases the home relations were disturbed. Their attainments in school were just about what is shown in our own institutions, to which I have referred. They lacked mental training. They lacked manual training, in order that the hands might be trained, the muscles and the mind might be co-ordinated. Few of them had trades. They lacked trades teaching, in order that they might find their niche and occupy it when they came again into the outside world.

Knowing the material with which he must work, methods were invoked to attempt its transformation. In this reformatory were established baths and a gymnasium. The cleansing and awakening of these young men was first attempted. Some were bathed daily and all at least weekly. They were trained under a skilled physical director. When their energies had been quickened, their nerves stimulated and their muscles steadied, they were put into a company and given military training. It was discovered that about one-third of the inmates could not control the eye or hand. These were put into control defective classes, and were given first freehand and afterwards mechanical drawing. These were graduated into manual training classes, and in turn went into trade schools. In this institution thirty-six different trades were taught. All of those received were required to attend the school of letters, the lectures and other means of mental culture. Every inmate was constantly employed in active effort from five in the morning until nine o'clock at night. The institution fairly vibrated with the tremendous energy put forth. The result has been the transforming of a class of degenerates from defectiveness and incompetency to useful citizenship.

How many of these offenders have been reclaimed? The answer comes from the records that have been faithfully kept. Eighty per cent. have managed to keep law outside the institution, and consequently remained out of prison. When you understand that under the old system of imprisonment, under the definite sentence, the best estimates give eighty per cent. as the number of those who returned to prison, the work of the modern, model reformatory is almost beyond comprehension. I have briefly summed up its work. Is there not something in the results it has achieved that speaks to us? The lessons we get from growing the tenderest plants, if we apply them to the broad field of agriculture, will lead us to principles that will help in agricultural progress. What about the training of

the defective or the degenerate? Can we not get lessons from the reformatory and school for feeble-minded youth that may be elaborated into principles for the education of all?

The work mentioned is that of reclaiming the fallen. Why not train properly those who have not fallen? What can we do that has not been done for the prevention of crime? That is the word for us to remember—prevention. "An ounce of prevention is worth a pound of cure." "It is cheaper to train a citizen than to support a criminal."

The things which will cure crime, will prevent crime. The preventive measures, prevention of crime, vice and pauperism, measures preventive of all that is anti-social, are many, but with some of them we are particularly interested. Greatest of all, is the educational system as we now have it—the school of letters. Next following it, as a voluntary measure, may be included manual training.

The conditions in the country and city are different. The greatest needs of each must be reached, and in our cities and larger towns I believe that manual training is to be a great factor, perhaps the greatest, of the coming education. The manual training high school is one of the splendid monuments to the intelligence and liberality of those who have planned Indianapolis' educational welfare. The public is not satisfied with having manual training in the high school alone. You will find that in some of the grades in this city it is also taught.

I have been very much impressed with the wide use of manual training. I have visited many institutions, for all kinds of unfortunates, defectives, dependents and delinquents. We find in some of the more progressive institutions of each kind that manual training is utilized. In institutions for orphans it plays a prominent part. Two notable examples of this may be seen in Girard College at Philadelphia, and in the Boys' Farm School on Thompson's Island in Boston Harbor. Every school for feeble-minded youth teaches manual training. This is as well illustrated in our own excellent institution at Fort Wayne. Reform schools for both boys and girls consider manual training as one of the great essentials in their work. Reformatories for adults, as I have pointed out, find it absolutely essential for their progress. Insane hospitals of the better type are beginning to take up manual training as a means of improving the condition of their patients. This is illustrated at MacLean Hospital, Waverly, Massachusetts, and the Pennsylvania Hospital at Philadelphia. In each of these manual training of several kinds are taught. In institutions for epileptics, manual training is helpful. Craig Colony for Epileptics, in New York, the largest and most characteristic institution of its kind in this country, depends upon the training of the hand as one of its valuable features. It seems to be the thing which is needed, not only to train the hand, but to stimulate the mind, and more than all that, to attract the pupil who might otherwise be dull, to an interesting school work. It means the training of the whole man, mind and muscles. Somehow with the exactness required in manual training there comes coincident with the moral training. Unless the work is perfectly true, it will not fit. Good workmanship means truth, and tells no lies. Manual training also teaches industry. An eminent speaker said to us the other day: "Morality is industry; industry is morality. They are interchangeable terms." He might have gone further, for in the scriptures we are taught that industry is

wise. Then morality must be wisdom. It is then we have the trinity—industry, morality and wisdom—each at once the synonym and the complement of the other.

The next most potent factor in prevention, it seems to me, is the compulsory education law. That applies to all parts of the State and to all conditions existing in the State. The reports made indicate that a year ago under this law 28,974 children were brought into the school through the activity of the truant officers, and for the year just closing that 24,199 children were brought into school by the same means. But with this record the work has not all been done, for in addition to the oncoming children who will become of compulsory age, there is a great difference between the enumeration and the enrollment of pupils. For the school year ending 1900, there were 191,197 children of school age who were enumerated but not enrolled in the public schools. Some of these attended private schools; a large number of them were beyond compulsory age, others were defective, and still many others were in the early ages and their parents hesitated about putting them into school. Notwithstanding all this, I have no doubt that there is a large number, how great we do not know, of compulsory age who do not attend school.

A necessary adjunct of the compulsory education law will be parental homes, provided preferably by the State. There the habitual truants can be cared for and trained. It is not right that they should be sent to the reform schools, for I fear for the results. Special schools will demand our attention. In these some of those children who are hard to control and others who are hard to teach may be brought together. There children who are defective in hearing or in sight, those who are a little slow in ordinary school work, may be put under the best teachers to be had, with the very best facilities that can be procured. Investigations that have been made concerning the physical defects of children have shown surprising results. In one instance as much as 72 per cent. of those studied were shown to have defective sight, and 11 per cent. to have defective hearing.

Physical training of one form or another is one of the things toward which we should look for some suggestions for future school advancement. The school houses of the future, in cities where there is water supply and sewerage, will be provided with baths. A proper cleansing of the body will make more useful the receptacle of training, and will make more pleasant the task of the teacher.

There is another thing to which I wish to direct your attention for a moment. It seems to me that Minnesota has led out in an experiment which we should watch with interest. They have in that State an agricultural college, as we have; but they have also established an agricultural high school, with a course corresponding in advancement to our high school course. To this pupils may go who have completed the work of the eighth grade in the public schools. This school has won much favor. Over four hundred children, both boys and girls, are attending it this year. Many of them have been sent there by their parents. They had thought of leaving the farm, but when they have come under the inspiration of enthusiastic teachers, who would bring into the lecture room the domestic animal to be studied, or take them into the conservatory to study the behavior of the plants under treatment, the composition and action of

soils, and the many other heretofore mysterious but now fascinating problems that have been presented, they have been turned back to the farmstead. Pupils have gone home after a term's or year's work and returned saying that the farm to them was a fascination, whereas before it had meant dull drudgery. Eighty-five percent. of the students return to the farm. More than twenty girls have brothers in the school and as many more have cousins. A member of the faculty says: "To me this means a lifting of home conditions scarcely to be computed." Shall not Indiana study Minnesota's example and establish such a school?

The tendency, we all know, is from the farm to the city. One-third of the population of our country today is found in the cities of 10,000 or more inhabitants. A half century more, and more than half our population will live in cities. Ninety per cent. of the arrests of the United States are from the cities. When we realize that the direct cost of crime, according to the estimates carefully prepared by Mr. Eugene Smith, of New York, is $200,000,000 annually, and the indirect cost is $400,000,000, making a total cost directly and indirectly of $600,000,000, can we not comprehend this immense scourge and what a great factor our cities are in promoting and developing it? Can we not further be impressed with the importance of turning the tide from the cities back to the country, and of doing that which will interest our children in rural pursuits and inspire them with a desire for those high callings? Is it not possible that in Minnesota's example we have a key to the solution of this problem, and may it not be even carried further? Can not nature study, that which is being taught to children to train them to see, to teach them the beautiful things of life, the principles of æsthetics, be utilized, in such a manner that we shall practically teach the principles of agriculture? Can they not be taught the principles of life from the domestic animals and the beneficial birds, from the cereals and from the weeds, in such a way that they will become interested and enthusiastic, so that they may seek that preparation which will lead them to happy and useful rural lives? While the possibilities are greatest for teaching manual training in our city schools, is it not true that the possibilities for teaching agricultural training, or at least the elements of agriculture through nature study, are greatest in the rural schools?

To sum up, then, we shall look to the future schools, where it is possible, for a three-fold training, mental, manual, and physical. Provision will be made for physic and physical examinations, in order that there may be known the proper diagnosis of each child's case. Individual treatment will become more prominent. Baths will be provided and a full awakening of all the powers of the physical man will be had, in order that he may respond to the other stimuli. Self-control, self-direction and self-support will be the objects toward which our education will tend, and these are the three things that are necessary for him who would make a success in life.

Truancy Law—Statistics 1900-1901:

No. Truant Officers in State	107
Total amount salaries paid	$27,885.50
No. days spent in service	14,192¼
No. visits made	65,890

No. pupils brought into school	24,993
No. attending public schools	23,551
No. attending private or parochial schools	1,442
No. who received aid	8,852
No. aided attending public schools	8,380
No. aided attending private or parochial schools	472
Total cost of assistance given	$19,791.48
No. prosecutions	199
No. prosecutions successful	162
No. prosecutions not successful	37
Salaries	$27,885.50
Assistance	19,791.48
Total cost of administering law	47 676.98
Amount spent per capita of children brought into school	1.15
Amount spent per capita of children aided to attend school	2.24

III. SCHOOL ECONOMY.

By Frank L. Jones, State Superintendent of Public Instruction.

The physical truth that a body has the tendency to maintain its state of rest or motion is also a truth in the world of metaphysics and applicable to the persistency of ideas and processes once established or to their resistance to innovations. The procedure in the education of today dignified with the name—The New Education—has in it after all not so much that is new, but represents rather the elevation of many irrelevant facts of the early school to the dignity of essentials in the new; add to this the enlargement of our horizons of history and science and the new education is explained upon a basis of the old. We continue to teach in nearly all of our schools about the same amount of arithmetic and grammar as was taught you and me. We have shifted from one method to another and back again in the presentation of these, but we have not the courage or determination or insight to insist upon the deferring of subjects requiring processes of reasoning until the pupils attain greater maturity. However important this praticular phase of school economy and as desirous as many are to have it discussed fully, there remain problems of administration more properly belonging to this part of the Symposium which need to be discussed at some length.

When our forefathers did the pioneer work in the western land in the pursuits of agriculture, commerce and education, they necessarily placed stress upon the things they could not do without. The plain cabin and not the brick mansion predominated. The log school house with its rectangular shape and windows on opposite sides was always rude and devoid of architecture and therefore inexpensive and capable of indefinite multiplication. The plentifulness of land led to large farms and great distances between neighbors. The lack of a highly developed commerce made rural life more attractive and remunerative. Urban population was of little consequence; farm life, the rule. The forces then at work in the formation of a school system were disintegrating in so far as they pertained to

administration as distinguished from the centralizing forces now at work. The great wealth of land made it possible to apply much of it to future uses in the formation of a financial basis for our schools, and we of today are relieved of much concern about local administration which is frequently of utmost importance in non-agricultural communities. Education became public and popular and as large families grew, small school houses dotted the country and were filled to the doors. So well did these pioneers perform their work that we have devoted our time to plans and processes of instruction to the almost entire neglect of the betterment of rural school administration, apparently neglectful or unconscious of the tremendous forces at work in the country to change its methods and operations. The result is that the most important and far-reaching problem of school economy presented to this generation is upon us, namely,

(a) THE SMALL SCHOOL.

Twenty years ago public education in rural communities was conducted upon a curriculum composed largely of the common branches. The teaching of physical geography and algebra in addition to the common branches was not uncommon, though it was not general, and great credit was given a township for its progressiveness and advancement when it provided for the teaching of these subjects. High schools were not established except in the larger cities. Young men and young women attended the rural schools until they were twenty-one years of age, and repeated annually the work of the advanced grades, thus often filling those schools with as many as seventy-five pupils under the direction of a single teacher whose business often degenerated into "keeping order." We need not turn to the statistical files of the department to prove that the large rural school was the rule and not the exception, such a condition being within the recollection of all mature people. In the decade 1870-1880 the average number enrolled in each school district was fifty-four. During the next two decades a constant decrease in the average is reported. The whole time of prominent educators was given to the rural common school. The favorite expression of one of Indiana's foremost State Superintendents in both oral and written statements was, "Establish a rural school at every cross-road." These stimuli to rural school house construction multiplied those schools unduly, and many of them need to be abandoned at this time. With the development of the course of study, the grading of schools, the introduction of new methods of teaching, and the growth of high schools, the young men and young women were sent to the new secondary schools in the villages, thus relieving the common school of many of its students; furthermore, the growth of cities demanding and attracting laborers thereto, and the demand for fewer laborers on the farm upon the introduction of improved machinery, reduced the number of young, vigorous, family-producing men and women in the country; again, it is argued that there are not so many large families of children in the country as in former years, and it is not difficult to prove that such is true. An examination of a large number of school registers throughout the State during the last twenty-four months shows in very few instances more than two pupils from one family, and in only one instance were there as many as four pupils enrolled from a single home. Two decades

ago, the school registers often contained the names of five or six pupils from one home, and it was not so uncommon to find two or more enrolled from a home as it was to find only one. All of these conditions and movements have led not only to a lessening of rural school attendance, but have, in many cases, left so few pupils that we can not maintain with profit, either financial or social, a great many of these schools. The great evil of the small rural school lies in its non-social character. It is wholly unable to furnish each of its pupils that educative influence which comes from association with many of the same age and same degree of advancement; it can not have, in many classes, enough of honest and helpful competition to establish a standard to which many a bright pupil would raise himself, and fails therefore to bring from him that supreme effort which develops and ennobles, and which comes only from a vigorous contest with his fellows. The humdrum and monotony of a recitation in a one-pupil class is discouraging to both pupil and teacher. Not only is the mental work of the school thus impaired, but the lack of enough pupils to organize a game on the school house yard prevents adequate exercise and tends to make morbid, selfish and pessimistic all who live in its atmosphere—the deadly quiet and inactivity of the small school kills the spirit. "The interest and enthusiasm of pupils and teachers depend directly upon the number and the ability of the pupils present. For the majority of children individual instruction, or anything closely approaching it, is not to be commended. Aristotle condemned such instruction on political grounds. It may also be condemned on pedagogical grounds. Children need the inspiration of numbers. Besides, numbers contain ethical value. As a rule, you can no more make a good school out of a half dozen pupils than you can make a powerful galvanic battery with one or two pairs of plates." The per capita cost in these small schools is not only much too large, but is continually increasing.

In 1879 the cost of education per capita was as follows:

In townships	$6 21
In towns	5 21
In cities	7 48

In 1900, twenty years later, the cost was:

In townships (per capita)	$10 50
In towns	5 21
In cities (per capita)	7 07

These tables are of more than usual interest on this point, and present to the taxpayer a strong argument for a solution of the problem of the small school. It will be observed at once that the per capita cost of education is constantly increasing in the country and towns, and decreasing in the cities. This condition in the rural school arises wholly from the prevalence of small schools. There were as many rural schools in 1900 as in 1879, the salaries in the former are not substantially different from those in the latter, the annual investment in school houses and appliances would about equal, but the attendance in them has constantly decreased. This condition makes necessary an expenditure for teachers, fuel, apparatus and repairs for the small school of today equal to that of the large one of two decades ago. In the towns the increase is due quite largely to

the establishment and equipment of high schools of small enrollment. Nearly all cities show congested schools, making necessary many pupils under the direction of each teacher, thus reducing the per capita cost. Add to this a saving in fuel, repairs, buildings and appliances, and the reduced cost of education in cities is explained. That there are within the State 115 schools with fewer than five in average daily attendance; 487 schools with fewer than ten in attendance; 1,253 schools with fewer than fifteen in attendance; 2,332 schools with fewer than twenty in attendance, more than 4,200 schools in each of which there is an attendance too small for vigorous and highly profitable work, is a matter of no little importance, either educational, social or financial. At the average rate of wages paid rural teachers, and for the legal minimum term of six months, the cost of instruction alone in 115 schools is $48 per capita; in 487 schools, $24 per capita; in 1,253 schools, $16 per capita; in 2,332 schools, $12 per capita. This calculation does not take into account the building improvements, cost of fuel, janitor service, repairs and apparatus. These items added to the cost already given would increase the amount considerably.

Professor Upland, of Wisconsin, says: "The decline of the rural school is so real that time need not be spent in rehearsing the facts. It is well known that not only in Wisconsin, but also in other States, the migration of population has been toward the cities, so that while at the beginning of the century, 96 per cent. of the population lived in the country, at the end, less than 70 per cent. were left.

"In the last thirty-five years the rural population of New York has decreased one-third. Of the 11,000 school districts, nearly three thousand, or more than one-fourth, have six pupils or less, and two-thirds have less than twenty-one. Vermont has 153 schools with fewer than seven pupils each. Maine has 1,000 with fewer than thirteen pupils each. Wisconsin has 183 with fewer than six; 858 others with fewer than eleven; with a total of 3,222 with fewer than twenty-one each."

No school can claim good conditions for work if it contain fewer than twenty-five pupils; nevertheless, one-half of the rural schools of Indiana are in operation with numbers ranging from three to twenty-five pupils in average daily attendance.

The problem of the small school, therefore, is a real one, and each year becomes increasingly difficult. It is pressing itself more and more upon our attention and now requires a solution. In these schools we must lessen the cost; we must enlarge the classes; we must improve the school socially and athletically. The question now arises, how shall we proceed to accomplish this much-needed reform? Upon one proposition we must all agree at once, namely, that our pupils must be collected into larger groups. We know that this means the abandonment of many school houses, consolidation of the schools, longer distances to school, and the transportation of pupils. It means the abandonment of the traditional "home school." It does not matter how much we deplore the conditions which make consolidation of schools necessary, the fact remains that it is the only rational solution of the question that has been offered. The very strong movement which leads to the centralizing of schools in towns in cities is to be deplored and should be avoided if possible. The preservation of the conservatism of the farm; the simplicity of its manners and dress; the ruggedness of its life; the peace, quiet and contentment

of its homes; its formation of good habits; its absence of vice; its opportunities for physical development, and its making of men and women of clear consciences, are items which argue eloquently for rural life and make its preservation of vital necessity to the welfare of our nation. It must not be required that the problem be solved by consolidating about the towns, but that consolidation which is distinctively rural, is expedient, economical and wise. Some of the best graded schools in the State are at a great distance from either cities, towns or villages.

(b) A NEW ORGANIZATION IN THE COUNTRY.

Any movement toward improvement in the economy of rural schools must direct itself first to the establishment of rural school privileges, opportunities and advantages equal to those of the towns and cities—the same length of school term, equal ability in the teaching force, equal opportunities in supervision, and appliances equally as good. That the conditions are not the same may be seen from the following tables:

Average wages paid teachers per day in townships	$2 04
Average wages paid teachers per day in towns	2 42
Average wages paid teachers per day in cities	2 85
Average length of school term in townships	134 days
Average length of school term in towns	153 days
Average length of school term in cities	180 days

The cities offer teachers a double inducement when they pay better wages and give a longer tenure. This condition makes the rural school an experimental school for thousands of teachers. When it is considered that 20 per cent. of our teaching corps become new each year, and that nearly all of these new teachers begin in the country, it becomes evident that the rural schools suffer unduly from incompetent instruction due to inexperience. We must, of course, give great credit to the many faithful teachers who, for considerations other than salary and length of term, devote themselves for many years to the welfare of the rural schools; but the great body of the rural school force is anxious to get into a corporation which maintains a longer term and better wages. This constant exodus of teachers keeps many country schools in a state of chaos. In one instance, a rural school had ten different teachers in an equal number of years, and each in succession taught, in that school, his first term. Even though they were bright young men, who gave promise of successful careers, the inexperience and timidity of the first term make inevitable many mistakes. No lasting, nor, indeed, very important impression can be made by a new teacher upon a strange community during one brief school year.

The difference in conditions between the country schools and city schools arises (1) from a higher per capita expense in the country, due to the enormous waste which comes from the maintenance of too many schools in nearly all townships; (2) to a lower local tax levy in the country, and (3) to the advantage which comes from the aggregation of wealth in cities.

The last point is one we can not consider; the second so touches the taxpayer that little can be done toward raising the local levy; however,

there is no excuse for the practice in many communities of limiting tuition expenditures wholly to the funds distributed by the State. A small local levy in many corporations would improve the schools perceptibly. It is in the first, therefore, that the chances for improvement lie. We have already considered the matter of consolidation, but there remains a phase of it which has not been discussed, inasmuch as it does not arise from the necessity of abandoning the small school. Take any three schools, for example, in which the total enrollment is one hundred, or more than thirty, in each school, and what are the possibilities of educational and economic improvement? In the first place, we propose a plan by which all of the pupils may be educated in one school house, avoiding thus the waste in repairs which comes from the maintenance of three buildings. Abandon two of the school houses and transport the pupils to the third one, maintain eleven months of school, secure the services of a capable, professionally trained teacher who can do advanced work in addition to the common branches, and provide for the instruction of the pupils in the various grades during the months indicated in the following schedule:

Grade 1	*Grade 2*	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*Grade 9*
April.	April.	April.	April.	Sept.	6th. Sept.	7th. Nov.	Nov.	Nov.
May.	May.	May.	May.	Oct.	6th. Oct.	7th. Dec.	Dec.	Dec.
June.	June.	June.	June.	Nov.	6th. Nov.	8th. Jan.	Jan.	Jan.
July.	July.	July.	July.	Dec.	6th. Dec.	8th. Feb.	Feb.	Feb.
Sept.	Sept.	Sept.	Sept.	Jan.	6th. Jan.	8th. March.	March.	March.
Oct.	Oct.	Oct.	Oct.	Feb.	7th. Feb.			
				6th. March.	7th. March.			
				6th. April.	7th. April.			
				6th. May.	7th. May.			

By requiring the attendance of the fifth and sixth grades during nine months, the fifth grade work may be completed by March 1, the sixth grade work by the following January 1, the seventh grade work by the following January 1, and the eighth grade work by the close of the regular eighth grade year. The time given to each grade would be as follows:

Grade 1	6 months
Grade 2	6 months
Grade 3	6 months
Grade 4	6 months
Grade 5	6 months
Grade 6	7 months
Grade 7	7 months
Grade 8	8 months
Grade 9	5 months

Each pupil in the course of his rural school life would have sixty-one months of school work, an increase of thirteen months over the minimum requirement of the law, or nearly two years of instruction more than is now given in most rural schools; it would solve the problem of maintaining a professional corps of teachers in the rural schools by giving employment except in the month of August; it would give to the local rural communities at least one year of advanced work; it would enable the local school officers to pay better salaries without increasing the levies, the saving of the salaries of two teachers being more than sufficient to pay a considerable increase for the better instruction by the well trained teacher, and yet maintain a longer term; the saving in fuel, repairs and

tuition would pay the cost of transporting the pupils; it would solve the problem of grading in that it provides for a maximum of six grades at one time, though there would be only five grades during the winter; it would make larger classes and thus improve the spirit of the school; it would make unnecessary the exposure of small children during the winter months; it would make a better and larger rural social unit by bringing a larger area into close contact; it would make literary societies and entertainments a possibility among the young people; it would centralize the library interests by concentrating the effort upon one rather than three library communities; it would intensify the work of each grade by reducing the number of grades under the control of the teacher during the sessions, enabling him to give much more time to each grade; it would keep the school distinctly rural; and would make possible a more perfect supervision, by the County Superintendent, by reducing the number of visiting points, enabling him thus to make frequent inspections during the year.

The objections that will be made are, first, those that are made to all forms of school abandonment and centralization; and, second, that the session during the summer would be too long. The first objection can be met with ease; the second is scarcely a real objection. The actual confinement to the school room need not be great; for the education that would come from regulated work and play, even during short daily sessions during the summer, would more than offset the usual loss to the child during the long summer vacation under the present order, and would meet the valid objection of parents that at present the daily sessions are too long for the small children. The loss of time which accompanies the present system of summer vacations would not be so great to the child, inasmuch as the spirit of the home about the winter fireside, and the reading and study upon the part of the child's elders, would keep the former in an atmosphere of study, reading and general culture. The culture of the rural home reaches its highest point in the winter.

Under such a plan rural teachers might be adequately compensated. It would enable the country not only to keep its best teaching ability, but would attract good teachers who are now working in cities and towns. Why should it not? Are not the cities provided with competent supervisors, who can guide new teachers with greater care than can be exercised in the country? Are there not more children in the country than in the towns and cities? Why should not the conditions be as good? The influence of a strong teacher—a teacher of broad culture, good tastes, successful experience and mature mind—working in a given community for a period of five years as an educator, literary leader, church worker, and leading citizen is a thing unknown in most communities. Why should not a rural teacher under the proposed plan go into a school community and work diligently for a time sufficiently long to make an impression upon it, and to lead it into a new life of culture? Are not the acquaintance with the children and homes, the knowledge of the grading and classification of the pupils, the familiarity with the strengths and weaknesses of the children and of the community sufficient reasons for the retention of a good teacher in the community for several years, if the compensation will justify his staying? Could not such a teacher establish a local public library and give it permanency? Would not the whole educational process

in the community be orderly and effective? Would not the customary loss due to a change of plans, methods, and acquaintances be overcome, and order, growth, and permanency given to the culture of the rural group?

I repeat that the first step toward the upbuilding of the rural schools must direct itself to the questions of the tenure and the compensation of rural teachers. Our laws relating to libraries, school appliances, and supplementary books are adequate, but they will not be effective until we have teaching upon a professional basis.

The argument that the plan would throw many teachers out of employment is not a valid one. When it is considered that from twenty to forty per cent. of the rural teaching corps becomes new each year, and that any such change as is contemplated above must be a gradual one, it is apparent that it will not relieve any of the teachers now employed. It would, however, affect the applicants for admission to the profession.

(c) FREE TEXT-BOOKS.

A third important matter which has agitated other States more than Indiana is the advisability of a Free Text-book Law. The last General Assembly gave considerable time to the consideration of a free text book bill, and will be called upon again each session to enact such legislation as seems wise in this connection. I am free to say that when I consider all points in favor and against the use of free text-books, I have no very positive convictions upon the matter. At this time I see no great demand for free books, and would counsel the maintenance of the status quo. The matter is referred to in this place, though briefly, that the association may have an opportunity to discuss it.

(d) TEACHERS' ASSOCIATIONS.

There is a growing feeling that teachers' meetings are becoming too numerous and too frequently unprofitable. It is not within our present sphere to discuss at length the conduct and frequency of those meetings which may be called purely voluntary, but we have as educators and officers the right and duty to shape legislation that will give us adequate returns for the expenditure of time and money in educational associations required, sanctioned or supported by our statutes. The total cost of conducting county institutes for the last fiscal year was $16,112.88. Of this amount the State provided $6,100 and the teachers, either by direct assessment or through the purchase of tickets for entertainments, gave the bulk of the remainder, say $10,000. In addition to this annual outlay, each county maintains, usually during the two days following Thanksgiving Day, a county association involving additional expenditures of time, and money to the amount of $6,445.15, making a grand total of $22,558.03.

A desirable step for us to take, it seems to me, is to organize the association and institute forces into a definite system under the control of the State, effecting thereby a system of greater strength and efficiency.

The present practice of holding summer institutes has many weaknesses so well known that they do not need to be discussed here. Suffice it

to say that the interruption of regular lines of summer employment, the lack of a proper educational attitude at that season, and the extreme heat operate to prevent interest and enthusiasm.

The principal objection made to winter institutes is the inability to secure institute instructors. Under a plan formulated with permanent instructors under the direction of the State Board of Education or State Superintendent of Public Instruction, local officers would not have the anxiety incident to trying a new or inexperienced lecturer. Let us provide for regular instruction during four days of each institute week by the instructors appointed by the State, hold the institutes during the school term, do away with the county association, devote Friday and Saturday of the week to professional programs or a joint township institute in which the teachers have full charge and an opportunity to participate in discussions. Briefly stated, this will overcome all of the objections to a summer institute and many of those heretofore urged against the winter institutes; it will give us a great educational week of six days in each county when teachers' minds are in the proper attitude toward educational affairs; and it can be maintained upon the funds now applied to those purposes.

Sources:

(1) From the County Auditor ($100 from each county)	$9,200 00
(2) From the teachers (as heretofore)	10,012 88
(3) From the County Association sources	6,445 15
Total	$25,658 03

Disbursements:

(1) Three instructors at $3,000 each (annually)	$9,000 00
(2) Three instructors at $2,500 each (annually)	7,500 00
(3) Three instructors at $1,200 each	3,600 00
Traveling expenses, etc	5,558 03
Total	$25,658 03

This arrangement provides for three complete sets of instructors, all of whom would be agents of the State and at its command during the entire year to perform such professional work as might be required in addition to the regular instruction in institutes. Even if it should be found necessary to hold an occasional institute in the summer, the advantages of this system seem apparent.

In conclusion, it seems that only the more important matters of concern to School Economy have been discussed; others are apparent to the members of this association, but can not be discussed at this time. If we shall apply ourselves to the proper direction of educational affairs related to the Small School, the Reorganization of District Schools, Free Text-books, and County Teachers' Associations, we shall be abundantly supplied with matters pertaining to School Economy.

IV. SUPERVISION.

By Charles A. Van Matre, County Superintendent Delaware County.

Not a few educators of other States have paid high tribute to Indiana's system of public instruction. Particular reference is frequently made to the excellence of her rural schools. Perhaps the most striking feature is the uniformity. To secure this the State has assumed control in many particulars. She has established the uniform course of study and has selected uniform text-books, for the grades. She has a uniform standard qualification for teachers. These are matters which many other States leave to local control which results in many plans and much diversity. Indiana has the one system arranged and organized by leading educators—men who by ability, training, and experience are best able to perform such a duty. In establishing a uniform course of study, the purpose is to carry the same degree of excellence to all parts of the State alike.

The execution of the plan is under the direction of supervisors—the state superintendent, the county, city, and town superintendents, the township trustee, and the town and city boards of trustees. Whatever difference there may be in uniformity is due to the individual ideas of the supervisors. By far the greater power of control is vested in the smaller units—the township, town and city. With a large number of supervisors, some skillful and some unskillful, the personal equation may enter largely into the administration of affairs, thus breaking the unity more or less. Where conditions are different uniformity may not be desirable, but assuming conditions to be the same, then is one general plan better than all other plans, and the personal equation should be eliminated. If there be a science of teaching, there must be some well defined laws known to the students of the science. To follow the principles of this science would, of itself, produce uniformity.

Indiana, in establishing the township unit system as opposed to the district unit system, made her first step from localized authority toward centralized authority. The schools of the township are under the control of one official, who is responsible for their management. The various districts have uniform lengths of term. The buildings and equipments are similar. Teachers are selected and located as he wills. He is limited in his authority in a few particulars, but in the main he has control of the educational affairs of his township. The progressive movement towards improvement is largely in his hands. With a wise official in charge, the plan has given excellent results. The township unit system, as distinguished from the district unit system, is the old question of strong centralized government and states' rights. In the early history of Indiana, the districst system was necessarily the one in vogue. The school was more of the nature of a private school supported by each separate community. Course of study, length of term, text-books, selection of teachers would be wholly under local control. When the State assumes control, supporting the schools by uniform taxation, all these irregularities are undesirable, and the control is placed at the one head—the township trustee. The first changes were uniform length of terms and the selection of teachers by one official. Later has developed the uniform course of study and uniform text-books. There are still some powers left in the hands of

the separate districts, yet the tendency has been away from localization toward centraliztaion. A new movement such as the consolidation of schools, as exemplified by recent legislation, will begin by localizing the authority to be given over to centralized authority later.

As in the township, so in the city or town. The board of trustees determine the policy. In practice, a superintendent is selected into whose care the educational affairs are delivered. He makes careful study of the conditions under which he must work, and makes his recommendations to the board for their approval. He is supposed to be trained in his profession with judgment superior to that of the board, yet the real controlling power lies with the representatives of the people—the board of trustees. However, the board is usually composed of successful business men, who are familiar with the means by which the best results are produced. They give the superintendent much liberty and hold him responsible. Thus there is greater centralization of power in the hands of one individual than in the township.

While the management of two townships or towns is very similar, the bond of unity is not controlled by higher supervisory power. Although the county superintendent has general supervision over all the schools of his county, his direct authority is limited, and the city school may be removed from his supervision entirely. In practice, he may exercise many powers that legally belong to the trustees. However, the welfare of the schools may depend on the harmony existing between officials—thus it appears that the step from a township unit system to a county unit system has not been taken.

The county superintendent may sit as a court of appeals in certain cases, such as the location of school houses, transfers, etc.; but the initiative action must have been taken by the trustees before the county superintendent may pass judgment. Primary directions does not lie within his delegated powers. If no appeal be made, he has no authority.

The State is yet further removed from direct supervision of actual school work. Appeals may be made from certain decisions of the county superintendent to the state superintendent, but the cases are infrequent. His duties are of the nature of compiling statistics, making book orders, guarding and distributing school funds, interpreting the school law—all very important duties, but not the duties connected with actual school management. He may visit a county every two years, and come in contact with county and city superintendents now and then, but he has little time or opportunity to advise regarding the manner in which affairs should be conducted.

In answering the question, What should be Indiana's next step in education as to supervision? I would recommend a reversal of the supervisory powers. Let all supervisors arise from one head—the state superintendency. Uniformity can thus be secured; well defined principles of teaching can be followed; the highest degree of planning can be carried to less favored localities; whatever is new or valuable can be given to all alike. School buildings erected should be under State control. Modern principles of construction and sanitation should be in the planning of every building erected. Courses of study for grades and high schools should be uniform within certain reasonable limits. Local conditions may require variations, but the control should be by the State.

True, the state superintendent can not look after the details of the system, in each separate school. The working out of the details must be left to the county and city supervisors, who must be subject to directions from the State.

To execute the plan properly necessitates additional appropriations and an increase in the force of assistants. At present, the great State of Indiana, proud as she is of her system of education, pays to her state superintendent a smaller salary than do some of our States to their city superintendents. With the thousands of teachers, and the numerous superintendents of the great State awaiting direction, the State can not pay a salary to its state superintendent to exceed that of a superintendent of a city employing a hundred teachers. Most any large city has a stronger force of assistant supervisors than has the state superintendent a force of deputies. The city superintendent may have a special supervisor of music, of writing, or drawing, of grade work, with salaries to excel the salary of the state superintendent. The office should be given dignity and tone by paying a salary commensurate with the services required. There should be a departmental system within the department—supervisors of method, of architecture, etc., but over all the one head.

The county should be similarly organized. The position should be made the best salaried school position in the county, and a man worthy of the salary selected to fill it. A number of assistants sufficient to supervise the details of the schools should be given him. A city of twenty thousand inhabitants makes far better provision for supervision than does a county of sixty thousand. The schools of a county are not uniformly good, ofttimes from lack of supervision. Until provision is made for closer supervision, the best results can not be secured. Some of the powers now in the hands of the trustees should be under the directions of the county superintendent—the matter of transfer, the location of school houses, selection and location of teachers to be approved by the trustees of the township.

In conclusion, I would say that the principles of supervision set forth are found in any large business corporation. The control centers in some one individual, who in turn holds minor officials responsible for the discharge of certain duties. May our schools adopt the best business principles.

V. THE TRAINING OF TEACHERS.

By David M. Geeting, Superintendent Schools, Greensburg.

Anyone can teach school; anyone can run a bank; anyone can manage a railroad. Not one of these statements is true; yet, among us may be found those who believe all of them. Nevertheless, it is becoming more and more apparent to those who employ teachers that a person to teach well and successfully needs some training in the practice of his profession. In the discussion of this subject we must not overlook the first essential and also the greatest in the make-up of the teacher—natural ability. Every teacher should feel that within himself there should be that subtle power, that aroused attention, which makes the matter of directing instruction a

much easier one. But we must not be expected to define "natural ability," for it is that potent force more quickly felt than accurately defined. It is, in short, that large human sympathy, that keen insight into human activity, which, coupled with a distinct notion of what education means, makes the great teacher. These prime essentials, plus the careful professional training, make the ideal teacher. We feel that no one will deny that increased skill in all phases of teaching follows a well-directed course of professional training, and if in some way it could be accurately determined, that only those possessing strong natural tendencies for this work might be selected, then the course of training would be much more valuable to its possessor as well as to the public in general. We too often look upon the matter of training from the wrong standpoint. A professionally trained teacher has been regarded as one who possesses certain formulæ and prescribed rules to be used only in emergencies. In other words, the teacher that easily gets out of these perplexing emergencies is too often regarded as an ideal one, because of her skill and not as a result of training. The trained teacher is the systematic one, who from her superior insight into her material directs it with a master hand. She will need skill and tact, and heart and knowledge the same as the poorly trained teacher, but by her superior training will be enabled to accomplish the largest possible amount of labor with the least amount of dissipated energy. In the training of teachers we must be understood to mean the training in the use of their own powers under a sympathetic and competent critic, as that to be most desirable in this magnificent work. Scholarship is just as essential a qualification as the training, but if it shall be acquired first, the other more easily follows. It is he who uses his means economically that becomes independent financially, so it may be said of him who uses his knowledge of subjects wisely, becomes in the end a trained teacher. But the demands of the times may be accurately determined by watching the courses of study of our normal schools and colleges, as they prepare to meet the demands of their patrons. In recent years, the establishment and maintenance of departments of pedagogy with special inducements to teachers, show the trend of this matter. In the last General Assembly a bill for the establishment of another state normal school had quite a following—another indication of how the people are thinking on this question. It may be not out of place to say here, that while we believe the General Assembly will determine the question of the establishment of another state normal school in its own time, the matter to be determined in this is not simply the establishment of another such school, but rather determine the policy of the State in this. If this policy is to be one such school or several of them, it will be determined when this question arises again. In our sister State, Illinois, the question of building one additional state normal, by a combination of forces resulted in the establishment of three. When this question is once decided by the General Assembly once for all, it will mean that the policy of the State for a generation, during which time it has supported liberally one State normal school, shall be changed, the policy must be to establish and maintain such schools in as many places as the conditions impose and the demand for trained teachers warrants.

VI. WHAT SHALL BE INDIANA'S NEXT STEP IN EDUCATION, AS TO MANUAL TRAINING?

By Robert I. Hamilton, Superintendent City Schools, Huntington.

Briefly, she should weave manual training into her courses of study intelligently and as rapidly as conditions will permit. I say first "intelligently," because unintelligent work is never good, and in school work it is an abomination. If manual training must pass through all the inane and unintelligent stages that much of our nature study work has passed through, it were better to leave it out altogether for a while until we have thought about it a little. Secondly, I say, "as rapidly as conditions will permit," and this need not be slowly.

Observe that I say manual training should be woven into the courses. Manual training should not be an independent course, added to or engrafted upon the present courses. Neither does it require the reconstruction of the present course of study; nor to be made the center around which all the other school exercises shall revolve. The nature of manual training itself and its pedagogcial purpose require that it begin as early in school life as possible, viz., in the kindergarten or the primary school. I quote from Charles R. Richards, Director of Manual Training Department, Teachers' College, New York: "* * * it will be only when the work is approached in this spirit (viz., the idea of teaching through handwork, rather than teaching handwork), and the regular teacher comes to use handwork expression in the same way that she now uses speech and writing, that handwork will reach its full possibilities in the primary school, or, for that matter, in any other stage of school work. When this work is assimilated in the primary school and there brought into organic relations with the school life, it will not be long before its proper function will be understood by all teachers, and the day will have passed by when manual training is thought of as a little work with tools in a room apart from and divorced from all the other interests of the school." Already the kindergarten course and very much of our work in the lower grades—the drawing, painting, crayon work, clay modeling, sand moulding, paper folding and cutting, pasting, stick laying, building with blocks, measuring, cardboard construction, etc., is manual training; indeed, it is the elementary course in manual training. In the intermediate grades some additions, principally in sloyd work in wood, will be necessary, and in the higher grades a pretty thorough course with the simpler wood-working tools must be added.

I should be far from willing to deny the girls the benefit of tool work, and even of bench work. Why should not a girl learn to drive a nail true, to saw to the scribe, to bore a hole with a gimlet, to turn a rolling pin, or to whittle a lead pencil? Similarly, I would not rob the boys of the discipline of the shears, the needle and thread, and the scientific preparation of a simple meal.

In support of the view that the manual training work should begin with the earliest work in the general course, I quote from report of Committee on Manual Training, N. B. A., 1898 (page 781): "Very desirable results will not flow from manual-training work until that work is con-

tinuous from the kindergarten up to and through the high-school period, and it seems imperative that the educationists should so understand it."

Unless the Hoosier country home has forgotten the "ancient and honorable" customs that were in vogue "when you and I were young, Maggie," we need not give ourselves great concern at present about manual training in the district schools. The same thing is true of the villages and smaller towns. These "home courses" were probably not very systematic or logical, but they were effective. So, in what I am saying about manual training, it is the larger towns and the cities that are in mind.

As I have indicated, in the public schools the manual training work must begin with the kindergarten, or, in its absence, with the primary school, and must be continuous with the general course. But a clear distinction must be made between manual training and industrial training, or the teaching of trades. The common schools have no function in connection with industrial, or trade, schools; but manual training, including the household arts, forms a large and important field in the province of the public schools. Manual training is a legitimate part of the general public school course. Trade schools, industrial schools, technological schools, have no place in the common-school system. It is not the province of the public schools to make carpenters or blacksmiths or even "tinkers;" though the graduate of a manual training school is well along toward smithing, carpentry, and many other forms of skilled workmanship. Doubtless manual training may be fully defended and justified on purely industrial grounds, but such is not my purpose today.

Manual training and industrial training are radically different in their methods and their purposes. The aim of the industrial school is to make mechanics, artisans, with finished material products as the ultimate end; and its methods are controlled by this aim. The aim of manual training is to educate the child through the manual processes, to develop men and women, and its methods are such as will best realize this purpose. Neither can perform its function best without at the same time promoting the ends of the other, some times in a marked degree. And this is not to be regretted; rather, it is to be heartily welcomed. That a boy in securing the mental discipline of the try-square, the chisel, and the lathe, is also getting the skill of eye and hand so necessary to the mechanic, or vice versa, is certainly not to be deplored, but is fortunate for both the boy and the State. Yet, the public school must confine itself to the cultural side, and the industrial school to the material side. But the public school has a distinct and an important duty in relation to manual training, and it must recognize it and discharge it promptly, courageously, and efficiently.

There is a constant, increasing, and pernicious tendency in modern life toward paternalism in government. Government control, government operation, government ownership, is the modern panacea for all social and economic ills. The public school, being the most helpless and most long suffering branch of the government, is made the convenient tool for all the uncomfortable problems and impracticable schemes of underdone statesmen and adolescent "educators." It thus occurs that occasionally the school, willingly or otherwise, takes on offices that do not lie clearly within its field. But the manual training school must not too far encroach upon the functions of the home. It must approach all its processes from the educative side—from the side of the child to be taught, not from the side of the

process or of the task to be performed. In our modern life the school has taken into itself unavoidably and properly many minor duties that were formerly left to the home; and it is impossible to determine a fixed line that shall divide the province of the school from that of the home. If, in the domestic science department, the girl learns how to select the materials, and to make a better garment, or if she learn how to purchase a steak and to cook it so that it be more palatable, more digestible, and more nutritious, and learn all this incidentally to the main purpose (which is the mental development of the girl herself through these processes), certainly the home has no just cause of complaint. If in the wood-working department, the boy learn the correct use of the hand-ax, the saw, and the chisel, and if he learn the properties and relative values of building materials, and all this incidentally while the manual training is developing him into the best type of citizen, we fathers will not protest that our province has been invaded.

In no other way than as just indicated should the public school take on the functions of the home, the church, society, or special and technological institutions; nor must it longer permit them to unload their difficult and disagreeable burdens upon its broad and unresisting shoulders. It has sufficient troubles of its own.

It will be seen that the manual training in the grades should not be a special course, to be elected by those who are so minded; but it must be a general course required of all. There is no more question on this point than there is on reading and writing. Neither must the manual training crowd out any other thing of value. The modifications in the lower grades will be scarcely, if at all, appreciable. The revisions and additions in the intermediate and higher grades will not be extended or violent. And it is believed that the gain in spirit and discipline and in enhanced power to deal with the subjects of the traditional course will amply compensate for any additional time and effort required by the manual training. This has proved true in the case of music and drawing, and the argument seems valid for manual training. I quote again from Mr. Richards: "It (handwork) is no longer simply so much more work added to an already crowded curriculum, but a helpmeet and assistance in dealing with the constant problems of the school."

"Busy work," for the sake of keeping the child busy, is downright evil. Correlation for the sake of correlation—forced correlation—is unpedegogic and harmful. Correlation properly understood and applied is an exceedingly valuable pedagogic principle. It had been intelligently practiced for generations before its recent discovery by the latter-day Herbartian saints. Natural correlations abound among the various subjects, and this fact his been recognized and used by good teachers in all ages. The relations of manual training with many of the other subjects are intimate. This is especially true as to geography and nature study. In working with paper, card board, fabrics, raffia, wood, iron, food products, etc., a study of the properties of materials, habitat manner of growth and cultivation, methods of preparation and manufacture, commerce, transportation, etc., becomes a necessity. I am not sure that the nature study that grows out of manual training is not more valuable than all the labeled nature study with which we have been worrying the teachers and boring the children. I quote from the "proceedings" of a conference on manual training, held

at Boston, in April, 1891. "It is difficult to imagine a person so placed that a knowledge of the properties of the three great construction materials—wood, wrought iron, and cast iron—should not be of great value to him, whether he be a laborer, a politician, a watchmaker, a lawyer, an engineer, a physician, or a minister. If, then, the child can obtain a practical knowledge of the common materials and tools of daily life while he is getting his intellectual training from them how much greater the benefit of the course." I quote once more from Mr. Richards: "Only the regular teacher can bring the handwork into harmonious relations to the school life and use it as a true medium of expression of the other school work." To be sure, this makes it necessary for the normal school and the department of pedagogy in the university to provide adequate courses in manual training, but it is their business to supply the urgent needs of the State in the preparation of the teachers for her schools.

Now, as to manual training in the high school. (And here I am on dangerous ground. There isn't any one who knows much about manual training in the grades; so I could say about what I pleased there; but as to high schools—that's different.)

It is as illogical to begin with the high school to develop a system of manual training as it was to begin with the university to develop a system of common schools. Yet this was the method adopted by the New Englanders in the early settlement of this country, and perhaps it was the best, under the peculiar conditions. Certainly they are to be commended for establishing their universities, even though they had no general system of education. Likewise, towns and cities that have established manual training high schools, with no definite course in the grades leading up to them, are to be commended; provided, the conditions were not favorable for the installment of such a course. In any advance movement there must be pioneering, and these high schools are the pioneers of the manual training movement. They have shown us the value of handwork for general education, and we heartily endorse them.

Since education through the motor activities is of so great worth with boys and girls of high school age, of how much greater value must it be with the children, in the most impressible years, when the body is so active and supple, and when these activities most need to be controlled and guided. Clearly it is in the elementary school that manual training is of superior value as a factor in general education. The logic of the situation then is, that the manual training high school must be a continuation of the manual training course in the elementary school—must grow out of and be the necessary consequence of the manual training work in the grades. The necessity for the control and guidance of the motor activities, and their value as a factor in general education, decrease as the pupil advances in his course, hence a smaller proportion of his time and energy must be given to manual training in the higher grades and the high school than is required in the lower grades.

Shall the high school course in manual training be required or elective? I think it should be elective. The reasons are probably as valid for elective work in the eighth and seventh grades also. It should be additional to the regular work of the high school and not a substitute for any part of that work. The time may come when the material equipment shall be so ample and when the high school course in legitimate manual

training shall have been so fully developed that this line of work shall stand the equal in character, dignity, and cultural and educational value of the classics, the modern languages, or the commercial course. In that event, a full or a partial course in manual training may be offered as a substitute for some other line of work. Until that time one hour per day or two or three hours per week, in one or two periods will suffice.

It is the experience of those who have given manual training an adequate test that it holds pupils in school longer, it takes more pupils into the high school, and of those who enter the high school it carries more through to graduation than is otherwise the case. The children are happier and better contented, consequently attend more regularly and are less prone to misconduct. And, indeed, this is not unexpected. Any continuous line of work that arouses interest and adds zest to school duties will give that result. Again, manual training will awaken some of the sluggish and the indifferent, it will open up possibilities that they had not dreamed of, it will assist some to "find themselves," to know what they are good for, and to see that probably they were not made in vain.

Manual training will lighten the burden of discipline. The nervous child and the child with a superabundance of animal spirits will here find an appropriate outlet for his surplus vitality. Activity so controlled and guided is no longer disorder. Some of the indolent, the indifferent, and the evil disposed will become interested in manual training and through its agency will be reformed. But he who expects manual training to solve the problem of discipline with all the "bad boys" is doomed to disappointment. Some of these boys are constitutionally and unalterably opposed to physical or mental labor, and they will have nothing to do with anything that so resembles work as does manual training.

On the whole, the results of manual training work where it has had a sufficient trial are very encouraging, although they have not wholly satisfied the enthusiasts. Perhaps they expected too much. The excellent results that have thus far attended manual training work in the high school are largely due to the fact that it has been elective, and none but earnest pupils with definite purpose have engaged in it. In my opinion, the number that elects manual training will be composed of the choice one-fourth of the high school pupils and a remnant of less desirable material that takes up the work for various reasons. I do not concede all, nor the half, that is claimed for manual training, and yet I am an ardent advocate of its intelligent general introduction. I have no idea that it is the panacea for all school ills. If it do one-half of what its sponsors claim for it, then the installing of manual training in her public schools should be "Indiana's next step in education."

7. Arbor and Bird Day Program, 1902.

To the Pupils in the Public Schools of Indiana:

We are pleased this year to send you a new program for the observance of Arbor Day. You will find it much more attractive and interesting than the programs of previous years. This little volume contains several excellent pictures of beautiful trees and shows how they may be used in decorating school grounds. Do not fail to compare the school premises having beautiful trees growing about the schoolhouse with those having nothing to adorn them. If your school ground is not already like one of the best of these shown in the pictures, will you not take immediate steps to see that different varieties of trees are grown upon your school lot, and that the children who come after you as pupils in the school may have the benefit of the beautiful shade and the adornment which goes with trees?

The excellence of the Arbor Day publication this year is due to the Secretary of our State Board of Forestry, Mr. William H. Freeman. He has spent many days of valuable time in the preparation of the work and the program. He is greatly interested in the promotion of tree culture and thinks that the best way to do it is to interest the children in the public schools so that when they become the men and women of this commonwealth they will influence legislation to the extent of encouraging and requiring the preservation of our native trees and the growth of new forests.

I hope that Arbor Day, this year, will be observed with pleasure to all school children and profit to Indiana.

Very truly,

FRANK L. JONES,
State Superintendent of Public Instruction.

ARBOR DAY PROCLAMATION.

STATE OF INDIANA,
EXECUTIVE DEPARTMENT.

To the People of Indiana:

Following a custom which has increased in interest with each succeeding year since its adoption, I hereby designate October 24, 1902, as

ARBOR DAY.

The rapid disappearance of our forests is awakening the public conscience to the fact that the time is present when urgent, intelligent and practical efforts should be made to restore, in some measure, at least, the generous gifts which nature bestowed, but which have been swept away to provide for the constantly increasing demands of a constantly increasing population.

In the celebration of Arbor Day the schools of the State should manifest special interest by the introduction of appropriate essays, songs and recitations, as well as by the planting of trees, shrubs and vines. Children should also be advised of the necessity for the protection and multiplication of song birds by all practical means.

In the planting of trees on school grounds it is suggested that, among others, one should be in memory of the late President McKinley, and another as a memorial to the late Governor Mount, whose great nature was in harmony with the woods and fields in which he spent the larger part of his honorable life.

The people have a vital concern in the propagation of forestry, and I earnestly recommend that Arbor Day be made an occasion for the further beautifying of public grounds and highways, thus bequeathing to succeeding generations an heritage of immeasurable value.

Done at the Capitol in the city of Indianapolis, this 4th day of July, 1902.

WINFIELD T. DURBIN,
Governor.

UNION B. HUNT,
Secretary of State.

HISTORY AND ORIGIN OF ARBOR DAY.

The first to call attention in this country in an impressive manner to the value and need of trees, because of their beauty and adaptation for ornamental purposes, and their value to all classes of people in the general welfare, was Mr. George P. Marsh, who, for many years, represented us at the courts of Italy and Turkey. It was during his residence at these places that he saw the needs, and the subject was impressed on his mind.

In Europe, Mr. Marsh found the governments making active endeavors at great expense to renew their forests, which had been greatly depleted. He found the forests to be the most cherished possessions, and regarded as the most valuable product of the soil. He also found schools and colleges established for the training of men for the successful cultivation of forests, and saw the growing of trees in forest masses reduced to a science and established as one of the prominent departments of the government.

His observations led Mr. Marsh to write his publication entitled "The Earth and Man," containing the excellent chapter, "The Woods," to which we are indebted for the awakening of the people to the importance and necessity of heroic efforts toward forest conservation.

It was about this time that a practical movement was inaugurated by the late Hon. J. Sterling Morton, then Secretary of Agriculture, for tree planting in Nebraska. It was the thought of this pioneer of the plains, who knew and felt the value of trees about the home, to enlist his fellow-people throughout the State in the work of tree planting on one and the same day. This movement resulted in the establishment of Arbor Day for the State of Nebraska, and in the issuance of a proclamation by the Governor of that Commonwealth recommending its observance by tree planting throughout the State.

At an annual meeting of the State Board of Agriculture at Lincoln, Neb., January 4, 1872, the Hon. J. Sterling Morton introduced the following resolution, which was unanimously adopted:

Resolved, That Wednesday, the 10th day of April, 1872, be and the same is hereby especially set apart and consecrated for tree planting in the State of Nebraska, and the State Board of Agriculture hereby name it Arbor Day, and urge upon the people of the State the vital importance of tree planting, and hereby offer a special premium of $100 to the agricul-

tural society of that county in Nebraska which shall upon that day plant properly the largest number of trees; and a farm library of $25 worth of books to that person who, on that day, shall plant properly, in Nebraska, the greatest number of trees.

Over a million of trees were planted in Nebraska on the first Arbor Day, April 10, 1872.

In 1875 the Governor of Nebraska, by public proclamation, set apart the third Wednesday of April as a day to be observed in the planting of trees. Annually thereafter other governors made such proclamation until the winter of 1885, when the Legislature passed the act which designates the 22d of April, birthday of Mr. Morton, of each year as Arbor Day, and making it one of the legal holidays of the State.

Then in 1895 the name and the fame of Nebraska was further recognized and fixed by the following joint resolution which was approved by the Governor, April 4, 1895:

Whereas, The State of Nebraska has heretofore, in a popular sense, been designated by names not in harmony with its history, industry, or ambition; and

Whereas, The State is pre-eminently a tree-planting State; and

Whereas, Numerous and honorable State organizations have, by resolution, designated Nebraska as the "Tree Planter's State;" therefore, be it

Resolved, By the Legislature of the State of Nebraska, that Nebraska shall hereafter, in a popular sense, be known and referred to as the "Tree Planter's State."

At the same session, and as an outgrowth of the same sentiment, the following joint resolution was also adopted:

Whereas, The adoption of a State floral emblem, by the authority of the legislature would foster a feeling of pride in our State and stimulate an interest in the history and traditions of the commonwealth; therefore be it

Resolved, That, the senate concurring, we, the legislature of Nebraska, hereby declare the flower commonly known as the "Golden Rod" (Solidago serotina) to be the floral emblem of the State.

Approved April 4, A. D. 1895.

It is estimated that, because of Mr. Morton's efforts, more than 800,000,000 trees are beautifying the State of Nebraska alone. Minnesota first observed Arbor Day in 1876, in which year 1,500,000 trees were planted. The States of Michigan, Iowa, Kansas, Ohio and Indiana followed in succession. Michigan passed an Arbor Day law in 1881 and Ohio in 1882. In most all the States Arbor Day is recognized and encouraged by the civil authorities.

Arbor Day was first inaugurated in Indiana in 1884, but the day was not given general recognition until October 30, 1896. Since that time it has been observed annually on the last Friday in October by direction of the civil authorities.

TO THE SUPERINTENDENTS AND TEACHERS OF INDIANA.

The general neglect and failure to ornament school grounds by the planting of trees and flowers has not escaped notice. In many instances effort toward improvement has been made. I am satisfied that the sentiment in favor of school ground adornment is increasing and is being largely aided by Arbor Day tree planting.

It is one of my well-established beliefs that school grounds should be made the most attractive places possible. Man's tastes and character are mostly fashioned by his surroundings, especially those incident to his early training. The better tendencies of mind and heart are drawn from environments marked by purity, taste and refinement. Beautiful surroundings make the school itself more attractive. A beautiful school yard in city, village or country means improved home yards and lawns, and an added interest and more ready aid from the patrons.

Pupils enlisted in the improvement and ornamentation of school grounds have inculcated in them a spirit which makes them more loyal to the school and its interests, and affects them in their home conduct. The feeling instilled by this work in the school will lead to a broader, loyal citizenship when manhood and womanhood is reached.

The schoolhouses of the State in the main are neat, substantial structures, but there is a general lack of school yard improvement. In the country it is exceedingly rare that an improved school yard is found. They are, in many instances, bare, bleak and uninviting. It seems to me a most grievous wrong to house and educate children for the greater part of the year amid such environment.

The lack of school ground adornment is not due to causes evident at first sight. It can not be attributed to poverty or lack of an appreciation of the beautiful; neither can it be due to educational indifference, for the people of Indiana are cordial in their support of schools and institutions of learning. The cause is due

A Half Mile of Maples on the Fort Harrison Road, Near Terre Haute, Indiana.

Fig. 2.

District School No. 2, Wea Township, Tippecanoe County. A View of One Side of the School Grounds.

Fig. 3.

School District No. 1—Sugar Creek Township, Vigo County, Indiana.

Fig. 4.

District School No. 11, Wea Township, Tippecanoe County, Indiana.

Fig. 5.

to the failure to appreciate the importance of comfort and beauty in the attainment of an education, and the relations of the pupil and the natural world.

The common error that pupils will not allow trees and shrubs to grow on school grounds should never be given credence. If any such disposition is manifested, it is an indication of an unnatural spirit of childhood and a positive evidence that trees should grow on the grounds.

The protective feature should be a good reason for school ground tree planting. A school ground so situated as to lack protection from inclement weather subjects its occupants to exposure. The winter gales, zero blasts and scorching suns beat with unchecked violence, causing discomfort and confusion to the pupils and teacher. The teacher is put to the test of contriving methods by which no pupil shall endure more than his share of exposure and still maintain the good order of study.

Besides the benefits mentioned, there is an educational benefit derived from trees. The selecting, planting and growing of trees on the school grounds will impart a knowledge of the principles and methods of such work. To plant a tree is not all there is to be done. It should be cultivated and cared for in an intelligent manner, and much information of usefulness will be acquired in doing this.

I sincerely trust that superintendents and teachers will make Arbor Day tree planting extensive and systematic, and that an intelligent method will be pursued and energetically executed until our school grounds shall be ideals of beauty and protection, thereby exemplifying the saying of Homer, "When we plant a tree, we are doing what we can to make our planet a more wholesome and happier dwelling place for those who come after us, if not for ourselves."

There are instances where the school grounds have enough trees on them. In that case let the Arbor Day program be devoted to tree culture and the proper care of the trees on the ground. It might be arranged to have pupils plant trees at their homes, along the public roads and on public grounds for report on Arbor Day. Ideas of pruning, grafting and budding trees could be introduced and practical lessons given.

W. H. FREEMAN,
Sec'y State Board of Forestry.

ARBOR DAY.

In the early autumn,
When the leaves begin to fall
From off the pretty saplings
And the other trees so tall,
Is when I like to look around
To find some lonesome tree,
And take it up and plant it where
It may have company.

On the cherished play-ground
Where we passed our morning life,
And where the playful sunbeams
Chased away false pride and strife,
I think it is a fitting place
To plant a little grove,
And thus afford the little folks
A share in Nature's love.

In the coming seasons
Will the shadows on the wall
Portray a perfect picture
Of the life we would recall;
And when the winds of night-time
Chance to murmur soft and low,
They will the branches tell of that
Which happened long ago.

Also, will the children,
While they study, while they play,
Be elevated greatly
By the songbird's roundelay;
For they will find true happiness
Among the merry birds,
And thus a lesson will be taught
By signs instead of words.

—Walton F. Stover.

HISTORY AND CHARACTERISTICS OF SPECIAL TREES TO PLANT FOR ORNAMENT.

THE OAKS.

There are about thirty species of oaks growing native in the United States. Of this number seventeen are known to be growing native in Indiana, though a few of the species are rare and very local.

The oaks, as a whole, are the most useful trees for general requirements, and this fact has resulted in their almost total extermination. The oaks possess ornamental qualities much beyond the estimate generally accorded them.

The ancients reverenced the oaks and attributed to them the mystic power to foretell coming events. The oaks are connected with the establishment of the two oracles of Jupiter at Dodona, and in the Lybian oasis by the two black doves which flew simultaneously from Thebes in Egypt. Tennyson, in his "English Idyll," characterized the lover as "The Talking Oak" in exclaiming the knowledge told him of his sweetheart, Oliva. Hercules, it is remembered, carried an oaken club.

The oaks for ornamental plantings can be purchased from reliable nursery firms, where they have been given a series of transplantings and root prunings which insure their success when planted at large sizes on lawns and in parks. The seedlings may be grown from acorns in a home nursery bed and transplanted at an age of two to three years to their permanent places with quite good success. The seedlings may also be taken from the forest and transplanted to their permanent places, but if too large a tree is transplanted success can not be assured.

THE BRAVE OLD OAK.

A song to the oak, the brave old oak,
Who hath ruled in the greenwood long;
Here's health and renown to his broad green crown,
And his fifty arms so strong.
There's fear in his frown when the sun goes down,
And the fire in the west fades out;
And he showeth his might, on a wild midnight,
When the storms through his branches shout.

In the days of old, when the spring with cold
Had brightened his branches gray,
Through the grass at his feet crept maidens sweet
To gather the dew of May;
And on that day, to the rebeck gay
They frolicked with lovesome swains;
They are gone, they are dead, in the churchyard laid,
But the tree, it still remains.

He saw the rare times when the Christmas chimes
Were a merry sound to hear,
When the squire's wide hall and the cottage small
Were filled with good English cheer.
Now gold hath the sway we all obey,
And a ruthless king is he;
But he never shall send our ancient friend
To be tossed on the stormy sea.

—Henry Fothergill Chorley.

WHITE OAK.

The white oak stands first of all in usefulness and noble characteristics. It fitly symbolizes some of the noblest traits of character, and its massive trunk and giant branches, when fully grown, embody that stability and strength which we admire in man. By its deep rooting it anchors itself against winds and tempests and grows for centuries. There are now standing in New England some white oak trees which are known to have been of good size when the struggle for independence was waging.

The white oak grown in open grounds is an object of scenic grandeur. Its majestic head is a mighty dome of beauty and its smooth body and limbs compel admiration. It grows in all ordinary soils and flowers in May and June.

It seems peculiar in early spring to see these great gray trees putting forth leaves as tender tinted and pink as many a timid flower. In their autumn childhood the leaves have a deep, ruddy, wine hue.

The leaves of the white oak are short-stemmed, with an acute base three to nine obtuse, entire, oblique lobes with a persistent clinging tendency in winter. The leaves are pubescent when young, but are smooth and bright green above.

The acorns grow in the axils of the leaves and are ovoid, oblong, and set in a shallow round cup. The seeds ripen in September and October, at which time they should be cured and stored by the process of stratification for planting in the spring in nursery beds.

BLACK OAK.

The black oak is a very common oak, and is usually found in connection with red oak, hickories and maples. It is frequently taken for red oak, but may be distinguished therefrom by its yellow inner and nearly black, scaly and rough outside barks. It

grows on either dry or wet uplands. Single trees grown in open ground are models of sylvan beauty. This tree as an ornamental specie is very greatly underestimated. It flowers in May and June.

The leaves are deeply pinnatifid and much like the red oak. In spring the leaves are red, but turn to silvery green when the tree blooms. They are rich red in autumn hue, but do not have the vivid touch of color so characteristic of the scarlet oak. The acorns are nearly round and set in a deep scaly cup and ripen in September and October. The requirements for planting are the same as for the white oak.

RED OAK.

The red oak is well distributed over the State and grows in moist, cool localities. It is closely related to the black oak, but easily distinguished therefrom by its more upright habit, smooth, lighter-colored bark, and by its shallow-cupped acorns. Planted in open ground it forms a majestic rounded head, with clean, smooth limbs. It is a rapid grower, but a little difficult to transplant; hence well treated trees should be selected for planting. It flowers in May and June.

The leaves of this tree are smooth, thin, oblong, pinnatifid, sometimes very much so, eight to twelve sharply toothed lobes and turn dark red after a frost. Usually its foliage is dense, but it has no semblance of heaviness. The unequal lobes of the leaves, with bristle-pointed teeth, give a light, pleasing appearance to the tree. They also lack the brilliancy of the foliage so charming to the scarlet oak. When growing under favorable conditions the red oak produces a very admirable effect. It has been the most successfully grown oak in Europe, because it readily adapts itself to varying climatic conditions. The acorns are oblong ovoid and are set in a large shallow cup with fine scales and a narrow raised border. The acorns are almost sessile.

SCARLET OAK.

The scarlet oak is generally found throughout the State, but more abundantly in the southern part. It is found in connection with the black oak, but is distinguished from that tree by its much more finely divided branches and rough, grayish-brown outer and

inner reddish bark. The scenic effects of this tree alone should commend it. Its leaves are almost skeleton in outline and are intensely beautiful in their autumn hues of scarlet.

All minor characteristics of the scarlet oak seem to be buried in the bright brilliancy of its autumn foliage, which has the most exquisite tint displayed by any of the oaks. The leaves at unfolding are as red as in the instances given for the red and white oaks. The scarlet oak at all times is a charmingly gay tree for landscapes and surpasses accounts given of it.

This tree contrasts beautifully with the black oak in foliage, which takes the sober shades of buff and orange. The leaves of the scarlet oak ordinarily are bright green and shining above, broadly oval, deeply pinnatifid, five to nine lobes, slightly cut-toothed with bristle tips, rounded notches and slender, yellow midrib. The acorns are roundish, depressed, one-half inclosed in a top-shaped, coarsely scaled cup, and are located in the axils of the leaf scars of the preceding year.

PIN OAK.

The pin oak is a very handsome, medium sized tree, mostly found in the southern part of the State, although it grows sparingly in the northern part. It is especially adapted to wet, rich soils of streams and swamps. It is a moderately graceful and ornamental tree for lawn and avenue planting, though it becomes straggling with age. It has a peculiar beauty, because of its drooping branches and dark greenish brown, rough, slightly furrowed outer, and reddish inner barks. The leaves are oblong deeply pinnatifid, sharply toothed, bristle-tipped, divergent lobed, rounded notches and both sides bright green. They strongly resemble those of the scarlet oak, but they are smaller and the sinuses extend almost to the midrib, which, though small in variation, changes the tree to a light, delicate, pretty appearance. The autumn hue is a rich red. The great abundance of galls has a bad effect in estimating the value of the pin oak as an ornamental tree. The acorns are globular, set in shallow, saucer-shaped cups, almost sessile and found in the axils of the leaf scars of the preceding year.

THE MAPLES.

The maples are among the most desirable trees for ornamental planting found in the State. There are about ten species growing native in the United States, and of this number seven are known to be native in Indiana. They possess qualities which make them excellent shade trees. Some of the species are rapid growers, while others are not. They have peculiar characteristics of soil adaptations and moisture that must be taken into consideration when they are planted. The flowers are terminal-racemes.

"The lovely maple, fair is seen
Emerald robed, crowned sylvan queen."

SUGAR MAPLE.

The sugar maple is found naturally abundant throughout the State in all rich, upland soils. It is a great favorite for the street and home ground planting. This tree may be made to have several forms of crown, not by trimming, but by the manner of planting. In open ground it forms a broad, obicular top; when crowded it forms a cylindrical crown, and in natural conditions a symmetrical head. In all forms the crown is well balanced and erect. No other tree is so neat and clean from the time of leaf expanding till the end of its autumn foliage, nor so free from attacks by insects and worms. It is hardy and recovers from shocks which would insure death to most species. This tree should be guarded from tree butchers under the assumed name of tree trimmers. Most frequently they are best when left alone.

The sugar maple flowers from February to April, according to season and soil, and the seeds ripen in September and October. The flowers hang in umbel-shaped clusters at the time of leaf expansion in the spring. The fruit is winged-shaped with strong tendencies to form right angles.

The sugar maple bears planting well, but trees of large size should have had the transplanting treatment before the permanent planting, the same as the oaks, though seedlings may be grown from seeds sown in a nursery bed in the spring after they have been stored in sand during the winter.

The leaves are deeply three to five acute-lobed, few-toothed, rounded notches, base hearted, glaucous beneath, smooth and green above.

RED MAPLE.

The red maple is very common throughout the State in low, wet soils. It is the most brilliant tree in autumn. The tree flowers in March and April and the seeds ripen in May and June. The red maple has a clearer head and darker aspect than the sugar maple. Its early blossoms are attractive and its autumn foliage is a perfect banquet of color.

The red maple thrives excellently around country homes where the moisture and drainage conditions are more suited to it than in cities. It is a surface rooted tree, and hence not adapted to the conditions found where paving and gas and water piping prevail. It is an easily transplanted tree and large trees can be transplanted successfully.

The leaves of the red maple are cordate at the base, cleft into three to five acute-notched, irregularly toothed lobes. The leaves are whitish underneath and smooth green above, but turn bright crimson in early autumn. The seed is winged and inclined to form a right angle.

WHITE ELM.

The white elm grows native throughout Indiana in soils of every character. It has considerable sentiment attached to it. The elm is associated with the "Well-Sweep" and "The Old Oaken Bucket." It was of the elm that Lincoln exclaimed, when returning from the army encampment at Washington he stopped his carriage to admire the grand tree, "Such a tree is one of the noblest objects of creation!" Bryant was inspired by the elm to an expression in the poem, "Forest Hymn," and Holmes said, "The best poems I have ever written are the trees I have planted."

There is a grandeur of thought in conserving and planting these glorious sons of the forest. No other tree combines so much vastness, grace and beauty as the elm. It bends to the wind and thus is less broken by storms that injure other classes of trees. It is well adapted for wide avenues, but the lines should be such that they will not be cramped for room to spread. It has more diversity of form than any other tree and should never be topped, but allowed to grow naturally, or it will become ill-shaped.

The elm flowers in April in numerous clusters fringed with long trimmed spray, which becomes so dense at times as to obscure the

branches. The seed ripens in May and June. They are light and chaffy and are easily blown hither and thither by the winds. The leaves are about two or three inches long, oval, abruptly sharp pointed, sharply serrated, pubescent beneath when young, but soon smooth.

The tree is most beautiful in June, soon after the leaves are expanded, but its autumn foliage possesses no brilliant hues. It increases in beauty with age. It is fairly easy to transplant.

"The elm is a kindly, goodly tree,
With its branches bending low;
The heart is glad when its form we see,
As we list to the river's flow.
Ay! the heart is glad and the pulses bound,
And joy illumes the face
Whenever a goodly elm is found,
Because of its beauty and grace."

WHITE ASH.

This species of tree is distributed generally over the State in rich soils. It forms a very attractive picture of rare grace and beauty in the forest. When not crowded, it grows a stout body with a stately, widespreading head. The limbs are smooth, clean and numerous, but not twiggy, and begin low on the body. The compound leaves form a delightful shade, but the two faults and drawbacks are that they put forth late and fall early. Its foliage is free from attacks by insects. The ash is a good tree to alternate with maples.

The leaflets, usually seven to nine grouped, are stalked lance-oblong, pointed, shining above, pale beneath and somewhat or entire toothed. The white ash flowers in May and the seeds ripen in September and October. It has stamens and pistils borne on separate trees, and thus only a part of the trees seed. The seeds are winged. The bark on the body of the ash is gray, furrowed, grayish-green on the branches and the buds are rusty in color. This tree is extensively cultivated for ornament.

THE LIN.

The lin is well distributed throughout Indiana in all rich soils. All persons who see the desirable points in trees for shade find it an attractive tree because of its generous, well-shaped leaves and

landscape effects. The fragrant blossoms are succeeded by the small globular one-seeded fruit, which ripens in September and October. It is said of the lin that for ornamental purposes it has no equal, and is largely cultivated for landscape ornament.

Whether in bloom or in fruit the lin is an interesting study. It possesses two distinct shades of green—the dark green of its leaves and the light apple green of its bracts. The leaves are large, more or less heart shaped, soft and downy, green and somewhat thick. The flowers are cream colored and fragrant, with five spatulate oblong petals hanging in clusters from a slender peduncle.

THE YELLOW POPLAR.

Naturally this tree is found in all parts of the State. In the early history of Indiana it was one of the most numerous and largest of trees. It and the elm are very much in contrast. In forests it is tall and stately of trunk, but when transplanted from the nursery on open lawns and parks it becomes a tree of architectural and symmetrical beauty, and is frequently clothed to the ground. It harmonizes well with dressed grounds and artificial surroundings. The lively green leaves of summer and the orange shades of autumn make it an attractive tree for all the season.

In the spring, when covered with its tulip-like flowers, it is a pleasing sight. Freely and unconsciously it throws its blooms out as though it were some lively wayside flower. In cultivation the tree is a great favorite, and when young has a high-bred expression. Persons desiring a fine ornamental tree, clean and attractive, will find it worthy of consideration.

The trees for planting should have been given the transplanting process, though they may be grown very successfully from cuttings or from seedlings produced in a nursery bed.

The poplar flowers in May and June, according to season and soil where found. The flowers are tulip-shaped, large greenish-yellow, growing on stout peduncles. The fruit is a pointed cone and hangs on until autumn. The leaves are large, smooth, three-lobed, with the end of one lobe seemingly cut off; stipules are light colored, large oblong attached entirely around the stem.

THE SWEET GUM.

The sweet gum is common to the southern counties of the State, but is rarely found in the northern part. It is a tree somewhat resembling the sugar maple, but has a conical head and widely branching limbs inclined upward at the ends. The bark is very rough and of a reddish brown color. The gum is a rapid grower, adapted to most any soil, and because of the peculiarity of all parts it is a most excellent tree for planting on lawns, parks and avenues.

This very beautiful tree has many distinctive features. It seems to evade all conventional patterns and is purely chaste and original. Every year finds it more extensively planted, and in beauty and outline it is said to be unrivaled. It is almost free from the ravages of insects and borers.

In autumn the foliage turns a rich orange and crimson color, and the curious shaped twigs with corky ridges add to its great beauty. The leaves are roundish, star-shaped, five to seven-pointed lobes, dark green, smooth and shining. The tree flowers in April and May and the fruit ripens in autumn. The tree is easy to transplant.

RED BUD.

The red bud grows abundantly throughout the State in almost every variety of soil, but most thriftily in rich loams. It is found in sizes from a small shrub to a tree of twenty to thirty feet high. It forms a handsome little tree with smooth bark, and in the springtime is aflame with bright, red purple flowers; hence it is very attractive on lawns. The flowers hang in sessile clusters before the leaves appear and cover the twigs entirely. The tree is scarcely less beautiful in autumn than when it is in flower.

The leaves are broad, heart-shaped, acutely pointed, dark green, smooth and glossy. Trees should have been transplanted before they are set on the lawn or any other permanent place. It is a rapid growing tree when under cultivation, and hence a valuable tree to plant for parks and lawns.

FLOWERING DOGWOOD.

The flowering dogwood is found in all parts of the State, but more abundantly and larger in the southern counties. It is a tree conspicuous for its flowers, and its autumn foliage is just as attract

ive; hence it is a most admirable tree for ornamental purposes. It flowers in the spring, making it a most striking tree in a forest or on the lawn.

There are few persons who do not appreciate the beauty of the dogwood when its bloom whitens the woods and banks in the spring. The involucre of the flowers unfold before the leaves are fully developed and can be seen at a great distance waving their cheery message of spring.

This tree should be more highly cultivated and planted. For roadside planting it can not be equaled. A variety with pink flowers is now cultivated in nurseries. The leaves are ovate, pointed, acute, bare and smooth on both sides. The bark is reddish tinted and rough, adding to the other ornamental features which the tree possesses. Trees of any size should have been given a good transplanting process before planting on lawns or open areas. Seedlings grown in the home nursery and transplanted to permanent places when three or four years old will do very well.

SERVICE-BERRY.

The service-berry is classed as a shrub, but it reaches the size of fifty feet in height and twelve inches in diameter under cultivation, and hence is a valuable tree for lawn ornamentation. It grows in all parts of the State, in both wet and dry soils. It is among the first trees to bloom, and is most conspicuous because of its many white flowers hanging in racemes of great abundance.

There is no passing it by; it is one of the spirits of nature that the dullest eye must perceive and admire. The fleecy white petals wave and beckon as if to attract attention and at the season of the year when there is but little foliage. It is a sign that grateful spring is on the way. There are many varieties of this specie.

The leaves are either narrow, oblong or roundish and in clusters with bracts, bright, green and smooth. The fruit is a small purple berry, and very edible. It ripens in June. This tree is easily transplanted and may be grown from seeds in a home nursery bed.

INSTRUCTION FOR PLANTING TREES.

The planting of forest trees for shade and ornamental purposes is poorly done in most instances. Not enough caution is exercised in the selection of the kinds and sizes of the trees to be planted, and the manner of taking up and transplanting. The preparation of the soil, and the care and protection of the tree after planting, are essentials which receive even less attention.

In view of the fact that it takes a long time to grow a fine shade tree, it is extremely necessary that the tree planted shall have qualities which fit it for the purpose for all time. If a tree is planted and in the course of time proves worthless and unsuited, it can not be replaced in a day. All the time and effort spent in its propagation will be lost and it will take years to replace it with a good tree.

Select trees of the longest lived species and the most hardy against all injuring conditions. The white, scarlet, red, black and pin oaks, white elm, white ash, sugar, Norway and red maples, lin, yellow poplar, sweet gum, flowering dogwood, service-berry, red bud and the pines, especially the long-leaved and arbor-vitaes, are the most suited. No better or finer trees for shade can be found than these natural forest trees rightly planted and cultivated. They are slow in reaching sizes of usefulness, but they are both beautiful and permanent.

The trees selected for planting should not be of over three or four years' growth, if they are seedlings planted directly from the nursery bed. If older ones are selected for planting, they should have been given a series of transplantings and root prunings.

It is an utter mistake to plant a tree of seven or eight years' forest growth, which has never been cultivated through a series of transplantings. The usual method of going to the forest, digging up saplings two or more inches in diameter, stumping them off at the tops, taking them up with only a few feet of stumped mangled roots, planting in scantily prepared places and soil, and leaving their progress to fate, will never produce satisfactory shade and ornament.

Seedlings of three or four years' growth, taken up carefully so as to preserve almost entire the small fibrous root system, trans-

planted in well prepared places and soil, and tended with reasonable care, will in a short time develop into finely formed trees.

It is estimated that most of the forest tree seedlings, of from three to five years' growth, have from two to five hundred feet of root system. In digging up these large saplings, the fibrous system, which is the necessary part to the life of the tree, is not taken up. The larger roots are only the carriers of the nourishment gathered by the fibrous roots. A tree taken up and transplanted in this condition must stand several years until a fibrous system is re-established, and suffers in most cases to the extent of death before this is done.

The seedlings, if planted in the spring of the year, should be placed in the ground just as early as the trees can be procured and the soil will allow working. The excavations should be sufficiently large for the setting of the roots without cramping. A hole three or four feet square and two or three feet deep is deemed ample. The excavations should be made sufficiently extensive to afford the rootlets free growth for nourishment, without being hampered by the hard walls of the cavities, and should be filled with good, rich soil.

When planted the trees should be mulched with tanbark or rotten straw to a depth of three or four inches to prevent a too rapid evaporation of the moisture, and also to keep down the weeds from around the trees. The weeds should be kept down for a distance sufficiently extensive to prevent the absorption of the substance from the soil and the smothering of the trees.

Whether trees are planted in the spring or fall they should receive the same treatment, but, owing to the facts of water settling in the excavations and the liability of freezing and thawing, I think early spring planting preferable.

Where trees are exposed to injury by reason of stock or other numerous agents, they should be protected by boxes as is shown in Figs. 1 and 2, which are simple, inexpensive and sufficient for the purpose.

Trees selected and planted as I have indicated will seldom fail in good results. There is no reason why this can not be done, as seedlings of nearly all the species, except the evergreens, may be found in most every locality in great abundance and may be

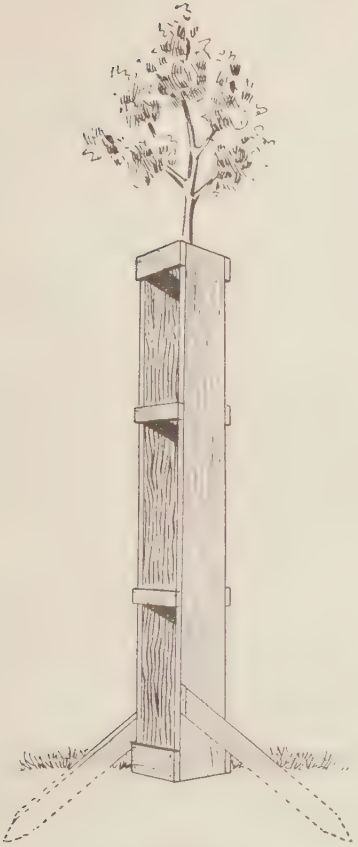

Fig 1.

Fig. 2.

secured for the asking. They may be taken up and transplanted at once without the injuries incident to shipping.

Trees should neither be planted in too wet or too dry soil. If in time of drouth, the holes should be dug a few days before and filled with water. The trees should not be planted, however, until the water has soaked away and moistened the soil suitably.

Too frequent and excessive artificial watering will be injurious to trees. If sufficient rain does not fall, the trees should be watered moderately every four or five days.

The soil should be finely pulverized so that it will pack closely around the roots. Straw or manure should never be put around the roots, as they will not pack closely, and thus the tree is not firmly imbedded in the soil.

The trustees or school directors can employ a party to plant the trees for a small sum and to look after them until they are successfully growing, and there should not be a patron who would not lend his efforts to such a movement.

SOME CAUSES WHICH INJURE TREES.

In the observance of Arbor Day it is eminently fitting and proper that the attention of the young people should be directed to a few of the causes which are destructive to trees. It is mainly through ignorance that so many trees die after many years of growth. Many of these deaths are caused by the different insects, while others result from the evils of persons. If individuals can be taught to recognize these evils, and use their efforts against them, thousands of beautiful shade trees may be saved to a green old age.

The elm leaf beetle is the most pernicious insect that is known to attack the elm. This insect belongs to a plant-eating family closely allied to the cucumber beetle, and resembles it very much in appearance. It has only recently attacked the elm, but is spreading rapidly westward from the eastern States, and wherever found ravaging the elm the trees should be thoroughly sprayed with Paris green or London purple, as per instructions given below.

Among the common pests known to all are the different species of caterpillars. These insects are produced from the eggs of the various moths, which, it may be said, number seven distinct families of twenty-four species. The moths fly in the springtime, from about the first of May to the last of July. After fertilizing they lay their eggs in the crevices of the rough bark, where, in a few weeks, they hatch the caterpillars.

The annual caterpillar, which is the most commonly known, has the following life history: The moths fly in May and June, at which time fertilization occurs. In a few days the eggs are deposited in the cracks and crevices of the rough bark of trees. In about three or four weeks the eggs hatch, and the young caterpillars at once eat the shells of the eggs and remain for several days in circular clusters, heads turned inward. They then disperse to

District School No. 8, Pawpaw Township, Wabash County, Indiana.
A Model Building Without School-ground Embellishment.

Fig. 6.

District School No. 4, Union Township, Tippecanoe County. A Type of the School Buildings and Grounds of Bleakness Found in the State.

Fig. 7.

the crowns of the trees and begin the destruction of the foliage. They keep up this work of destruction until September, when they come to the ground to mature to moths in cocoons under leaves, wood, bark, or, in fact, any place they may hide. In the spring they emerge as moths and repeat their life process.

Another caterpillar very destructive to the foliage of shade and fruit trees is the white-marked tussock moth. It is very abundant in early summer, and is seen suspended from trees by its silken thread, traveling over sidewalks, creeping up the sides of houses, entering windows and doors in search of food, crawling on the fences; in fact, it makes itself conspicuous everywhere. It is a very beautiful creature with its bright colors, tufts and pencils of hair. The moth produced by this caterpillar is quite inconspicuous in appearance. The female is wingless and never leaves the cocoon until after laying its eggs, when it drops lifeless from the cocoon. The cocoons are almost snow white, and the egg cover is froth-like in appearance on the surface of the cocoon. They are found on the trunks of trees, under cornices and other surfaces of similar character. Every one of these cocoons picked off and crushed under foot may prevent several hundred caterpillars the coming season. Autumn is the proper time to destroy the cocoons. The vast number of insects which injure trees is better appreciated when it is stated that between five and six hundred attack the oak; more than a hundred the hickory; nearly a hundred the maple; two hundred or more the pine, and hundreds the evergreens.

The following general remedies applied efficiently at the proper times will, in most instances, destroy the caterpillar pests:

1. Trenches, ten inches wide, twelve or sixteen inches deep, with vertical sides and holes four or five inches deep along the bottom at intervals of a yard, may be dug near the base of the tree, using caution not to injure the roots thereof. At mornings and evenings during moist, cool weather the trees can be jarred with a butting ram of some sort, well padded, so as not to bruise the bark in any way, and the worms will fall from the trees. In their attempt to regain the trees they will be caught in the trenches, when they may be scraped into the holes in the bottom of the trench and destroyed in a successful manner.

2. Grease bands may be painted around the trees at a distance of six or eight feet from the ground. The grease for this purpose

should be made of pine tar, resin and grease, in composition of 80 per cent. tar and 10 per cent. each of grease and resin. In order that these bands may be effective, the rough bark should be smoothed for about eight inches in width around the tree, and the mixture applied in a heavy coat so as to overcome the liability of the absorption of the grease by the bark. The bands should be kept fresh and active. Strips of cotton batting, tarred paper, or fly paper may be bound around the trees to act as grease rings. Do not use coal tar. These rings act very well in conjunction with the former process, as they will prevent the worms which escape the trench from again ascending the tree, and if applied before the eggs hatch will prevent the worms from spreading over the crowns of the trees.

3. The cocoons may be hunted from their various positions about rough bark, eaves of buildings, under dead leaves and wood, and destroyed.

SPRAYS FOR ALL INSECTS.

Lime Water.—Take one pound of pure unslaked lime and about seventy gallons of water. Slake the lime and stir into the water thoroughly until the quantity is of a milky fluid. Allow it to stand until the lime is deposited at the bottom, then spray the trees with the water. The same lime will do for three or four times. This remedy is very useful for insects in the larvae and pupal stages.

Sulphur Solution.—Take one part of potassium sulphide and five hundred parts of water. Mix the solution thoroughly, then spray the trees with the solution, and the caterpillars will at once leave the trees and the leaves will escape further damage.

Arsenical Washes.—Take one pound of Paris green or London purple and two hundred gallons of water, to which should be added a little flour or dextrin. Mix thoroughly in solution and stir constantly while spraying. This is one of the most valuable mixtures known, but as it is a poison many things will have to be considered before it is used. If it scorches the leaves it is too strong and must be further diluted.

Kerosene Emulsion.—Take one gallon of kerosene oil and half a gallon of boiling water, in which a pound of soft soap has been dissolved. Constantly churn the mixture for ten minutes and

gradually dilute it by adding eleven gallons of water. This mixture is a most valuable one for suctorial insects.

Bark scorching, stock, fire, carving, swinging, pruning and paving are other causes which tend to the destruction of trees. Bark scorching is an injury resulting from violent exposure of trees to the direct rays of the sun, and occurs on the west and southwest sides of the trees. It is indicated by the drying, roughing, splitting and falling of the bark. It may be avoided by shading the sides of the trees next to the sun with tree boxes or boards imposed. Trees affected should be smeared with a paste of clay and whitewash in mixture, or a paste of cow dung may be used.

Stock is harmful to trees by browsing on the twigs, gnawing the bark, breaking the branches and tramping the roots. Fire is a most damaging agent. The least fire heat will cause the bark to crack and peel off, though it may be some time after the damage before the fact is seen.

Leaves and rubbish should never be burned in such proximity that the heat may be felt to trees. The simple burning of the leaves of a forest will injure every tree around which the burning occurs. Inestimable damage is done trees where the leaves are raked into heaps and burned in the streets under the trees. The dying of thousands of trees in the cities may be attributed to this cause. The carving of the bark, swinging around small trees or swinging from the limbs of large trees cause injury. The fibers are strained and broken in the limbs to which the swing is attached, and the tree, after a few years, begins to decay generally. In small trees the swinging around them disturbs the roots and bends and breaks the fibers of the stem. Carving exposes the wood and forms a blemish, also a point for the attack of beetles, borers, and fungi.

Too much pruning is another cause of great injury to trees. Many trees now adorning the streets and avenues are sadly defective in limbs and body because of excessive and out of season trimming. Such trees are at the mercy of storms and extremes of every kind. A tree is a living organism and must be treated with care. The trimming should never be more excessive than clipping of stray branches or sapping sprouts. It is rare that the destructive wholesale topping results in anything near the beauty that nature herself would have formed. This is evidenced by the fact that the finest specimens of trees are found in localities where

the tree butcher is unknown. The time at which trimming may best be done is yet a matter of doubt, except that it should not be done at the time the sap is flowing freely. The times most universally agreed upon are early summer, June and early July, and in the autumn, after the wood is ripe. Prunings made at these times heal smoothly and leave less rotten wood.

Paving and the laying of gas and water mains in the cities are probably the most destructive influences to the successful keeping and growing of shade trees. The method of street improvement which has been most used is in every detail injurious to trees. When a street is paved and the walk is placed in from the street, the roots on both sides of the trees are destroyed almost to the stump. On each side of the tree a thick wall of concrete is placed and the roots are forbidden progress in search of moisture. The paved street quickly conducts the water into sewers and if the tree lives it must do so by accident. For the reasons given it is better to adopt a plan of street improvement which does not deprive the trees of almost their entire root system. The walks should be next to the street so that one side of the trees' roots are unharmed and free to perform their function. The reckless barking, chopping and abuse of trees by the workmen in paving should be prohibited.

Another feature of destruction in street paving is the cutting down of trees where they are in the way of improvement. Trees of many years' standing may be successfully transplanted to other permanent places if time is given property-owners to prepare them for removal. The plan of removal is as follows:

The preparation for removing trees should begin at least a year before the moving. At a distance of from four to eight feet from the tree, depending altogether on the size thereof, a circle should be dug around the tree to a depth sufficient to avoid damaging the roots. When this is done the earth should be removed from the roots next to the ring inward for about a foot or two. Use some kind of a wooden instrument for this, and be careful not to split or injure any of the fibers of the main root. The ends of the roots should be cut smooth, so that they will heal over quickly. Fill in the circle of space around the exposed roots compact with rich, loamy soil. Cover the whole with old rotten straw as a mulch to prevent evaporation. Water well throughout

the season. Stay the tree with ropes to prevent the wind from swaying or upsetting it. Let the tree grow during the summer in which time a fine network of rootlets will be formed, and will be the secret of success when the tree is removed.

The best time to remove a tree is in the winter, if it is a large tree, as then by pouring water on the ball of earth at the base it can be frozen compactly. The tree can then be pried loose and raised with little difficulty. If it is to be removed any considerable distance, it can be placed on a flat boat or sled and transported without injury. The ball of earth may be kept around the tree intact. If it is only to be removed a short distance, it can be lifted and carefully slid into position.

If the tree is small the removal may be made in the early spring, taking care when the tree is raised to bind the ball of earth with matting to prevent its crumbling away. It is urged that the moving be done in the winter or very early spring.

In making the excavation for transplanting the tree, make the hole large enough so as not to compress the roots in any way. Just prior to raising the tree from its original place, a portion of the top shold be removed. I do not advise the exaggerated cutting away of the top, one-half to two-thirds being sufficient. When the tree is transplanted place the roots naturally, and fill in with good soil, not, however, rich, light, loamy soil, but heavy, rich soil, and water very freely while filling in, instead of tramping. Plenty of water will cause the soil to settle compactly around the roots, which is necessary.

Mulch the soil again with rotten straw and stay the tree again with ropes to prevent its swaying. Water well during the season. When one or two years have elapsed the tree will again have a foothold and growth will take place. This can be done with satisfaction and many valuable trees that have taken years and years to grow are saved in this manner.

HISTORIC TREES.

"The groves were God's first-temples. Ere man learned
To hew the shaft, and lay the architrave,
And spread the roof above them—ere he framed
The lofty vault, to gather and roll back
The sound of anthems, in the darkling wood,
Amidst the cool and silence, he knelt down
And offered to the Mightiest solemn thanks
And supplication."

In our own country, and in our own time, there have been, and still are, ancient trees intimately connected with our history as colonists and as a nation, and which command the reverence of every American. The following list includes some of the more prominent trees that have been consecrated by the presence of eminent personages, or by some conspicuous event in the history of our country. They all have a place in our national history, and are inseparable from it because they were so consecrated. A knowledge of the events associated with their memories can not but engender patriotic emotions in the breast of every true American citizen.

THE CONSTITUTIONAL ELM.

When the members of the first Constitutional Convention met at Corydon, on June 10, 1816, to deliberate upon the articles of the organic law to be adopted for the government of the new State of Indiana, they held most of their meetings under the shade of a huge elm tree, on the banks of Big Indian Creek, a few hundred feet northwest of the rude State House, then located in Corydon. The old elm tree still stands in all its grandeur, being one of the finest specimens of our early forests aside from its historical significance. It spreads one hundred and twenty-four feet from tip to tip of its branches and is more than fifty feet high. It is cherished and protected by the citizens of Corydon as one of Indiana's famous historical landmarks.

THE BIG TREE.

Probably the most ancient of these living links of the present with the past was "The Big Tree" that stood on the bank of the Genesee River, near the village of Geneseo, New York. When the white man first saw it, it was the patriarch of the Genesee

Valley, and was so revered by the Senecas that they named the beautiful savannah around it and their village near it "Big Tree." It also gave name to an eminent Seneca chief, the coadjutor and friend of Corn-planter, Half-town, Farmers-brother, and other great leaders of the warlike Seneca nation, when Sullivan, with a chastising army, swept so ruthlessly through their beautiful land in the early autumn of 1779, annihilating villages, and leaving somber tracks of desolation behind him, that Washington, "chief of the pale-faces," who was held responsible for the act, was called, like Demetrius of old, An-na-ta-kau-les, or the "Town-Destroyer." "When your army entered the Six Nations," said Corn-planter to Washington in 1792, "we called you 'The Town Detroyer;' and to this day, when that name is heard, our women look behind them and turn pale, and our children cling close to the necks of their mothers." The Big Tree was an oak; and in the summer of 1857, a few weeks before its destruction, its appearance was a fair counterpart of another thus described by Spencer:

> "A huge oak, dry and dead,
> Still clad with reliques of its trophies old;
> Lifting to heaven its aged, hoary head;
> Whose feet on earth had got but feeble hold,
> And half-disboweled stands above the ground,
> With wreathed roots and naked arms."

It was in evident peril from the abrading current of the Genesee. Little of it was left but its mighty trunk. A vigorous elm, that had germinated beneath its roots, had clasped one of its larger but decayed branches, and seemed like another Aeneas piously bearing old Anchises in its filial arms. But it was a treacherous friend. It robbed the old tree of its needed sustenance, and, hour by hour, while it twined its young branches lovingly among the gnarled ones of the patriarch, it drew from it its life-blood. The trunk, when measured, was found to be twenty-six feet nine inches in circumference. Its age was doubtless more than a thousand years. During a great flood in the Genesee River, early in November, 1857, the Big Tree and the treacherous elm were swept away, and buried in the bosom of Lake Ontario.

THE CHARTER OAK.

Doubtless next in age to the Big Tree was the famous Charter Oak, in the city of Hartford, Connecticut, which was standing in the height of its glory, and estimated to be six hundred years old, when the good Hooker and his followers planted the seeds of a commonwealth there. It was upon a slope of Wyllys's Hill. On a stormy night—August 21, 1856—the old oak was prostrated. From pieces of the tree was made a chair now in the Senate chamber of the Capitol at Hartford, for the use of the Lieutenant-Governor. This tree once preserved the written guarantee of the liberties of the then infant colony of Connecticut. In 1687 Governor Andros, whom King James had sent across the sea to be Governor of all New England, appeared before the Connecticut Assembly, then in session in Hartford, and demanded the colony's charter. Tradition tells us that the charter was brought in and laid upon the table. In an instant all lights were extinguished and the room was wrapped in total darkness. Not a word was spoken. The candles were again lighted, but the charter had mysteriously disappeared; and though Sir Edmund searched diligently for it, his search was in vain. Captain James Wadsworth had seized the precious charter and concealed it in a hollow in the trunk of this friendly tree. The charter was not long concealed. James was soon driven from the British throne, and Andros from New England. Eminent English jurists decided that as Connecticut had never surrendered its charter it remained in full force. It was drawn from its hiding place, and the government was immediately re-established under it. From that time until its destruction, Wyllys's venerable tree was known as the Charter Oak. An interesting fact may properly be mentioned in this connection. Charles the Second granted the charter to Connecticut, which was concealed in an oak for its preservation. Charles himself was concealed in a hollow oak eleven years before (1676) for his own preservation, after the battle of Worcester. In honor of his king, and in commemoration of this event, Dr. Halley, the astronomer, named a constellation in the heavens Robur Caroli. The oak may be justly styled a royal tree. Spencer speaks of it as "The builder oak, sole king of forests all." It is an emblem of strength, constancy, virtue, and long life—attributes which ought to be the characteristics of a monarch.

White Oak Growing Natural in Butler College Campus, Irvington, Indiana.

Fig. 8.

A Sugar Maple Natural Formed in Farmyard of Andrew Black, Near Greencastle, Indiana.

Fig. 9.

PENN'S TREATY TREE.

In the summer of 1682 a small vessel called the Welcome sailed from England with William Penn and a company of Quakers for the shores of the Delaware Bay and River, on the borders of which lay a broad domain that had been granted to Penn by his sovereign. The settlers received him with great joy when he landed early in October. After making some arrangements with the colonists, Penn proceeded up the river, in November, to Shackamaxon (now Kensington precinct, Philadelphia), and there, under the widespreading, but leafless branches of a venerable elm tree, on the bank of the Delaware, he made a treaty with the Indians, not for their lands, but of peace and friendship, the only treaty never sworn to and never broken. "The Treaty Tree," as the great elm was ever afterward called, became an object of veneration. Penn loved the spot; and twenty years afterward, when he contemplated making his permanent residence in Pennsylvania, he tried to purchase the fine house of Thomas Fairman, by the tree, and the estate around it, considering it, he said, "one of the pleasantest situations on the river for a governor." The venerable and venerated "Treaty Tree" was protected with great care. It was not lofty, but widespread. During a gentle gale, on the night of the 3d of March, 1810, the venerable elm was prostrated. Its consecutive rings proved it to be two hundred and eighty-three years of age. The circumference of its trunk was twenty-four feet. The wood was converted by art into a great variety of forms for preservation. An arm chair was made of it and presented to the venerable Dr. Rush. The Penn Society erected a monument upon its site, with suitable inscriptions, which now stands near the intersection of Beach and Hanover streets, Kensington suburbs. The venerable Judge Peters, the esteemed personal friend of Washington, thus wrote after the tree had fallen:

"Let each take a relic from that hallowed tree,
Which, like Penn, whom it shaded, immortal shall be;
As the pride of our forests let elms be renowned,
For the justly-prized virtues with which they abound.
Though time has devoted our tree to decay,
The sage lessons it witnessed survive to our day;
May our trustworthy statesmen, when called to the helm,
Ne'er forget the wise treaty held under the Elm."

THE WASHINGTON ELM.

All strangers who visit Cambridge, Mass., look with interest upon the remnants of the venerable elm tree under which Washington assumed command of the Colonial army. At about nine o'clock on the morning of the 3d of July, 1775, Washington, accompanied by the general officers of the army who were present, proceeded on foot from the quarters of the commander-in-chief to a great elm tree at the north end of Cambridge common, near which the Republican forces were drawn up in proper order. Under the shadow of that widespreading tree Washington stepped forward a few paces, made some appropriate remarks, drew his sword, and formally assumed the command of the army. It stands in the center of a great public thoroughfare, its trunk protected by an iron fence from injury by passing vehicles, which for more than a century have turned out for this tree. But it is rapidly decaying, and the Cambridge park commissioners say that it will be impossible to save it more than a few years longer. A short time ago workmen went over the tree and cut off a considerable amount of dead wood, and there is not very much left to keep alive. It is intended to make a thorough overhauling of the tree this spring and to do everything possible to preserve it.

UNDER THE WASHINGTON ELM, CAMBRIDGE.

APRIL 27, 1861.

Eighty years have passed, and more,
Since under the brave old tree
Our fathers gathered in arms, and swore
They would follow the sign their banners bore,
And fight till the land was free.

Half of their work was done,
Half is left to do—
Cambridge, and Concord, and Lexington!
When the battle is fought and won,
What shall be told of you?

Hark!—'tis the south wind moans—
Who are the martyrs down?
Ah, the marrow was true in your children's bones
That sprinkled with blood the cursed stones
Of the murder-haunted town!

What if the storm-clouds blow?
What if the green leaves fall?
Better the clashing tempest's throe
Than the army of worms that gnawed below;
Trample them one and all!

Then, when the battle is won,
And the land from traitors free,
Our children shall tell of the strife begun
When Liberty's second April sun
Was bright on our brave old tree.

—Holmes.

Upon the one hundredth anniversary of the day when Washington here took command of the army the citizens of Cambridge held a celebration under the tree, and Mr. Lowell read a poem, of which the following is the third part:

"Beneath our consecrated elm
A century ago he stood,
Famed vaguely for that old fight in the wood
Whose red surge sought, but could not overwhelm
The life foredoomed to wield our rough-hewn helm—
From colleges where now the gown
To arms had yielded, from the town,
Our rude self-summoned levies flocked to see
The new-come chiefs and wonder which was he.
No need to question long; close-lipped and tall,
Long trained in murder-brooding forests lone
To bridle others' clamors and his own,
Firmly erect, he towered above them all,
The incarnate discipline that was to free
With iron curb that armed democracy.
Musing beneath the legendary tree,
The years between furl off: I seem to see
The sun flecks, shaken the stirred foliage through,
Dapple with gold his sober buff and blue
And weave prophetic aureoles round his head
That shines our beacon now nor darkens with the dead.
A man of silent mood,
A stranger among strangers then,
How art thou since renowned the Great, the Good,
Familiar as the day in all the homes of men!
The winged years, that winnow praise and blame,
Blow many names out; they but fan the flame
The self-renewing splendors of thy fame."

LIBERTY TREES.

It was the custom of our New England ancestors to plant trees in the early settlement of our country, and dedicate them to liberty. Many of these "Liberty Trees" consecrated by our forefathers are still standing. "Old Liberty Elm" in Boston was planted by a schoolmaster long before the Revolutionary War, and dedicated by him to the independence of the colonies. Around that tree, before the Revolution, the citizens of Boston and vicinity used to gather and listen to the advocates of our country's freedom. Around it, during the war, they met to offer up thanks and supplications to Almighty God for the success of the patriot armies; and after the terrible struggle had ended the people were accustomed to assemble there year after year, in the shadow of the old tree, to celebrate the liberty and independence of our country. It stood till within a few years, a living monument of the patriotism of the people of Boston, and when at last it fell, the bells in all the churches of the city were tolled, and a feeling of sadness spread over the city and State of Massachusetts, and in fact the whole United States felt a thrill of lofty patriotism and sad devotion when the news was spread over all the land that the Old Liberty Elm had fallen. A monument imperishable now marks the spot where the old tree stood.

THE RHODE ISLAND SYCAMORE.

The voyager up Narragansett Bay from Newport to Providence will observe the bald appearance of Rhode Island. The absence of forests, or large trees singly or in groups, excites curiosity and commands remark. Doubtless few travelers are aware that this baldness is the effect of the desolation wrought by the British while for three years they occupied Rhode Island. Necessity and wantonness went hand in hand in the work of demolition; and when in October, 1779, they left the Island, one solitary tree, an aged sycamore, was all they had left of stately groves and patches of fine forest that had beautified the island. That majestic sycamore was doubtless many hundred years old. It may have been there when the Scandinavian sea kings trod the forests around it. It was there when the Pilgrims landed at Plymouth, and when Roger Williams seated himself at Providence, that he might en-

joy perfect freedom in the wilderness. No doubt the eyes of Philip of Mont Hope, and Canonchet of Canonicut, of Witamo, and Miantonomi of the beautiful Aquiday, have looked upon that patriarch, which stood upon that gentle eastern slope of the island, a solitary survivor of the primeval forest. One who saw the tree a few years before it fell thus describes it: It was thirty-two feet in circumference within twelve inches of the ground. The storm had riven its trunks and topmost branches, and it was the picture of a desolated Anak of the woods; yet it seemed to be filled with vigor that promised it life for centuries to come. The tree finally became rotten at the heart and blew down, probably in the September gale of 1869. It stood upon the estate of Vaucluse, the property of Thomas R. Hazard, between his fine mansion and the Seaconnet or Eastern Channel. Seaconnet Channel, just below Vaucluse, was the scene of one of the most dashing exploits of the Revolutionary War. The British had blocked it up with a floating battery, the Pigot, armed with twelve eight-pounders and ten swivels. Captain Silas Talbot undertook the capture of the Pigot. Embarking sixty men on the Hawk, a coasting schooner, armed, besides small arms, only with three three-pounders, he sailed down under cover of darkness, grappled the enemy, boarded, drove the crew below, coiled the cables over the hatchway to secure his prisoners, and carried off his prize to Stonington. The destruction of wood on Rhode Island at that time was the cause of great distress to the loyal inhabitants who returned at the opening of the severely cold winter of 1780. Fuel was so scarce that wood sold in Newport for twenty dollars a cord.

"THE CARY TREE."

"The Cary Tree," planted by Alice and Phoebe Cary. As these sisters were returning from school one day they found a small tree in the road, and carrying it to the opposite side dug out the earth with sticks and their hands, and planted it. When these children had grown to womanhood and removed to New York City, they never returned to their old home without paying a visit to the tree they had planted. That tree is the large and beautiful Sycamore which one sees in passing along the Hamilton turnpike from College Hill to Mount Pleasant, Hamilton County, Ohio.

INDIANA'S FORESTS.

Indiana is a natural forest region. Its condition of climate and soil is highly favorable to a varied arboreal growth. Few continuous areas of greater extent in this country produce as many species of trees as are found within the limits of Indiana. The variety of soils in the State is an effective element in producing this diverse and abundant tree growth. But what is seen now of the trees is not to be compared with the timber and trees of the State in its earlier time.

At one time forests of dense, tall trees, the limbs of which were so interwoven that it was but occasionally that the sunlight could find entrance, covered the greater part of the State. There was but little undergrowth, and the heaviest woods cast a dense and gloomy shadow. Mile upon mile stretched these giant columns of trees and green arches reared by nature through centuries.

Originally seven-eighths of the 21,637,760 acres comprising the area of the State was covered with this dense growth of trees. Many of the most valuable species reached their maximum in every way within the bounds of the State. It was seldom that this broad expanse was broken, except by streams, lakes, Indian camps, the patches of prairie and the sloughs of the northern part of the State toward Lake Michigan.

The southern part of the State was more heavily timbered. No part of America could show more magnificent deciduous forest trees than once existed in the valleys of the Wabash and Whitewater rivers. The trees decreased in size proceeding to the northward and the most inferior were found around the lakes. The forest was composed of many kinds of trees growing indiscriminately.

White oak, ash, hickory, maples, beech, elm, cottonwood and lin were the prevailing kinds, and they varied much in making the proportion. The yellow poplar and the black walnut were numerous and frequently were the largest trees found in this primitive forest. More than four species of trees in the Wabash valley attained to a height of more than one hundred feet. The tallest recorded tree was a yellow poplar, one hundred and ninety feet in height, twenty-five feet in circumference and ninety-one feet to first limb. Among the oaks were to be found many giant trees.

The highest recorded oak was a scarlet specie. It grew in the southern part of the State and measured one hundred and eighty-one feet in height. The sweet buckeye grew to goodly dimensions. One of this specie grew in Rush County, and was said to have been when standing twenty-seven and three-fourths feet in circumference and ninety feet to the first limb. The celebrated buckeye canoe of the Harrison presidential campaign of 1840 was made from this historic tree.

The walnut grew abundantly and in frequent groves containing hundreds of trees, many of which were from four to six feet in diameter and one hundred and fifty feet high. The sycamore grew in the valleys, and was known to reach a diameter of ten feet and a height of one hundred and fifty-five feet. It is but seldom that a tract of virgin forest can be found in the State at the present time. There are, however, a few good forests still remaining within the State.

The list of trees following contains the names of nearly all the indigenous trees common to the State:

Common Name.	*Latin Name.*
White Oak	Quercus Alba.
Red Oak	Quercus Rubra.
Scarlet Oak	Quercus Coccinea.
Pin Oak	Quercus Palustris.
Chestnut Oak	Quercus Muhlenbergii.
Swamp White Oak	Quercus Bicolor.
Basker Oak	Quercus Michauxii.
Burr Oak	Quercus Macrocarpa.
Texan Red Oak	Quercus Texana
Black Oak	Quercus Veluntina.
Spanish Oak	Quercus Digitata.
Barren Oak	Quercus Marylandica.
Willow Oak	Quercus Phellos.
Shingle Oak	Quercus Imbricaria.
Swamp Oak	Quercus Lyrata.
Post Oak	Quercus Minor.
Chinquapin Oak	Quercus Acuminata.
White Elm	Ulmus Americana.
Hickory Elm	Ulmus Racemosa.
Red Elm	Ulmus Fulva.
Black Walnut	Juglans Nigra.
White Walnut	Juglans Cinera.
Pecan	Hicoria Pecan.
Swamp Hickory	Hicoria Minima.
Shellbark Hickory	Hicoria Ovata.

Common Name.	*Latin Name.*
Shellbark Hickory	Hicoria Laciniona.
White Heart Hickory	Hicoria Alba.
Small Fruited Hickory	Hicoria Microcarpa.
Pignut Hickory	Hicoria Glabra.
Buckeye	Ascelus Glabra.
Canoe Birch	Betula Papyrifera.
Red Birch	Betula Nigra.
Sweet Birch	Betula Lenta.
White Ash	Fraxinus Americana.
Green Ash	Fraxinus Lanceolata.
Blue Ash	Fraxinus Quadrangulata.
Black Ash	Fraxinus Nigra.
Yellow Poplar	Liriodendron Tulipifera.
Linden	Tilia Americana.
Sugar Maple	Acer Sachernium.
Black Sugar Maple	Acer Nigrum.
Red Maple	Acer Rubrum.
Black Locust	Robina Pseudacacia.
Honey Locust	Gleditsia Tricanthos.
Wild Plum	Prunus Americana.
Wild Black Cherry	Prunus Serotina.
Persimmon	Diospyros Virginiana.
Flowering Dogwood	Cornus Florida.
Hardy Catalpa	Catalpa Speciosa.
Sassafras	Sassafras Officinale.
Hackberry	Celtis Occidentalis.
Red Mulberry	Morus Rubra.
Sycamore	Platanus Occidentalis.
Iron Wood	Ostrya Virginica.
Chestnut	Castenea Sativa.
Beech	Fagus Americana.
Cottonwood	Populus Deltoides.
White Pine	Pinus Strobus.
Yellow Pine	Pinus Mitus.
Bald Cypress	Taxodium Distichum.
Tamarack	Larix Americana.
Red Cedar	Junipera Virginiana.
Red Haw	Crataegus Coccinea.
Red Bud	Caesalpinaceae Canadensis.
Black Haw	Crataegus Tomentosa.
Black Gum	Nyssa Sylvatica.
Tupelo Gum	Nyssa Aquatica.
Willows	Salix.

Lin, or Basswood, Growing Natural in Border of Forest Near Anderson, Indiana.

Fig. 10.

A White Ash Natural Formed Near Greencastle, on the Farm of Isaac Hammond.

Fig. 11.

A Yellow Poplar Growing Natural in Open Forest Near Greencastle, Indiana.

Fig. 12.

Constitutional Elm, Corydon, Indiana.

Fig. 13.

THE AUDUBON SOCIETY.

As time passes it is seen that our native birds are becoming less in numbers. The familiar birds which once gathered about our homes are rapidly disappearing, and seldom are we cheered by their songs and entertained by their movements. With them have gone many added interests in life, which can only be enjoyed by fostering the birds.

For the purpose of protecting and fostering our native birds, the Audubon Society has been instituted. It is named in honor of John James Audubon, the first noted student of the birds of America. Indiana has a State society, besides many local societies, in which both young and old are taking part. It is gratifying to note that many schools are perfecting organizations and clubs for the protection and preservation of birds.

These organizations can do a vast amount of good in the way of preventing and discouraging the destruction of and cruelty to birds. No better line of nature work could be instituted than the study of birds as to their coming and going, plumage, mating, nesting, feeding habits, songs, colors, manner of flying and walking, bathing and the regularity of all habits.

It is desired that the teachers and pupils shall lend their united action to this most commendable undertaking.

The following is an article written by Prof. Lawrence Bruner, of the University of Nebraska, entitled, "A Plea for the Protection of our Birds:"

The fact that insect depredations are increasing in extent each succeeding year makes it plain to us that something must be done to prevent it, and that quickly. We have found to our sorrow, that although we are continually making increased efforts to destroy these pests, our efforts avail but little, and the destruction of our crops goes on. What, then, is to be done? How can we be released from this ever increasing struggle for existence?

The answer is plain. Heed the advice of the naturalist who has made a study of the life-histories of the various other living creatures in the world about us. Do not condemn what he says without at least examining into it a little.

In his desire for bird protection the naturalist is not prompted by sentiment alone—far from it! Although from the sentimental standpoint solely the friend of birds would have sufficient grounds for making such a request.

But if we can not take up the subject of bird protection from the humane standpoint, if we have no chord of sympathy or sense of honor remaining, are we willing to adopt business principles in our dealings with the birds?

It is needless here for me to state that the insect life about us is numerous and varied. We all know this to be too true. Nearly, if not quite, nine-tenths of all animal forms belong here, while the individuals of many kinds are incalculable. We know also that their powers of reproduction are simply wonderful, being limited only by the amount of food available, etc. Now the disproportionate number of birds, on the other hand, with their "universal distribution, the remarkable locomotive power which enables them readily to escape unfavorable conditions, and their higher rate of life, requiring for their maintenance an amount of food relatively enormous," give to them a significance which few seem ever to have realized.

Briefly told, the economic relation of birds to man lies in the services which they render in checking the undue increase of insects, the devouring of small rodents, in destroying the seeds of noxious weeds, and by acting as scavengers on land and water.

Those who have studied the subject carefully have estimated that a loss of nearly $400,000,000 is sustained annually by the cultivators of the soil from insect ravages in the United States and Canada. This does not include the damage done to ornamental shrubbery, shade, and forest trees, nor to the grasses growing on our prairies. "But if insects are the natural enemies of vegetation, birds are the natural enemies of insects."

"In the air swallows and swifts are coursing rapidly to and fro, ever in pursuit of the insects which constitute their sole food. When they retire, the night-hawks and whip-poor-wills will take up the chase, catching moths and other nocturnal insects which would escape day-flying birds. Fly-catchers lie in wait, darting from ambush at passing prey, and with a suggestive click of the bill returning to their post. The warblers, light, active creatures, flutter about the terminal foliage, and with almost the skill of a humming-bird, pick insects from the leaf or blossom. The vireos patiently explore the under sides of leaves and odd nooks and corners to see that no skulker escapes. The woodpeckers, nuthatches, and creepers attend to the trunks and limbs, examining carefully each inch of bark for insects' eggs and larvae, or excavating for the ants and borers they hear within. On the ground the hunt is continued by the thrushes, sparrows, and other birds that feed upon the innumerable forms of terrestrial insects. Few places in which insects exist are neglected; even some species which pass their earlier stages or entire lives in the water are preyed upon by aquatic birds."*

In nearly every case where the food habits of our birds have been carefully studied, do we find that the good done far exceeds the possible harm that might be inflicted by our birds. Allowing twenty-five insects per day as an average diet for each individual bird, and estimating that we have about one and one-half birds to the acre, or in round numbers 75,000,000 birds in Nebraska, there would be required 1,875,000,000 insects for each day's rations.

*Chapman, in "Bird Life."

Again, estimating the number of insects required to fill a bushel at 120,000, it would take 15,625 bushels of insects to feed our birds for a single day, or 937,500 bushels for 60 days, or 2,343,750 bushels for 150 days. These estimates are very low when we take into consideration the numbers of insects that various of our birds have been known to destroy in a single day. For example, the stomachs of four chickadees contained 1,028 eggs of cankerworms. Four others contained about 600 eggs and 105 mature females of the same insect. The stomach of a single quail contained 101 potato beetles; and that of another upwards of 500 chinch bugs. A yellow-billed cuckoo shot at six o'clock in the morning contained forty-three tent caterpillars. A robin had eaten 175 larvae of Bibio, which feed on the roots of grasses, etc., etc.

Birds, like all other animals, feed upon that food which is most readily obtained, hence the insectivorous kinds destroy those insects which are most numerous—the injurious species.

Estimating that there is a single grasshopper, katydid, or cricket to each square yard of surface, it would require at least 650,000 bushels of these insects to cover the State. Not taking into account any of the myriads of other insect forms nor the rapid rate of reproduction which is going on among them, these alone would be nearly one-third enough insect food for our birds during the year. This being true, it is plain that at least twice as many birds could find the proper insect food in our State each year.

A perusal of the various works that have been written on the economic relations of birds to man will support the statement that, if we were deprived of the services of birds, the earth would soon become uninhabitable.

In addition to the actual good that birds do as recorded above in the destruction of noxious insects, many of them are engaged for at least one-half of the year in hunting out and devouring the seeds of various weeds and other, to us, useless plants. Such is the mission of the various sparrows, snowbirds, finches, and long-spurs which often occupy our fields in flocks of thousands during the winter months.

If, after ascertaining such truths as the above regarding birds, we continue to slaughter them, it is not due to thoughtlessness on our part. We do it wilfully and maliciously. The schoolboy may thoughtlessly rob a bird's nest or kill a bird or two. It is the duty of teacher and parent alike to teach him better, to show him how wrong it is to destroy life uselessly. It is especially their duty to prevent the destruction of birds. If each schoolboy in the State of Nebraska were to rob a nest of say five bird's eggs, what would be the result? Yet the making of bird-egg collections is getting to be such a "fad" that almost every boy enters into it more or less zealously at some time or other. Some single collectors in a single season take 500 or more eggs. This should be stopped. We can study birds and their nests without destroying either. A live bird is more interesting than a dead one. An egg left in a nest where it will in due time become a live creature is of more interest than an empty egg shell.

We, as citizens of the United States, pride ourselves on being highly civilized and humane. We are in some directions, in others not. We also claim to be intensely practical and business-like in everything. Are we?

In Indiana alone nearly three hundred and fifty different species of birds are found. Many of these species represent large numbers while some have become almost extinct. From morning till night these birds are working for us during their entire life. Constantly they are searching for and devouring the creatures that destroy fruit, vegetables and foliage, and feeding on seeds of noxious weeds. It is a lamentable fact that many persons are not aware that the birds are toiling for them, and kill them in the belief that they are thieves and intruders of the most dangerous character.

Instances are rare in which birds do harm, except in the case of the English sparrow. Birds that seem to be pecking at and injuring fruit are only seeking for worms, and the harm attributed to them is simply imaginary and not founded on fact.

Tree planter and teacher united in one shall be declared the best benefactor of modern times—the chief provider for posterity.—J. Sterling Morton.

He who plants an oak looks forward to future ages, and plants for posterity.—Washington Irving.

What conqueror in any part of life's battle could desire a more beautiful, a more noble, or a more patriotic monument than a tree planted by the hands of pure and joyous children, as a memorial to his achievements? —B. J. Lossing.

The man who builds does a work which begins to decay as soon as he has done, but the work of the man who plants trees grows better and better, year after year, for generations.

The teacher in charge of a school who does not in any way observe Arbor Day should seek a new field of employment.

JOHN JAMES AUDUBON.

John James Audubon, the naturalist, was born on a plantation near the city of New Orleans, La., May 4, 1780. His father was an officer in the French navy and owned a plantation in the then French colony. In early childhood he manifested a deep interest in birds and studied closely their habits. He received the best education that he could be given in America and then completed at Paris, France, where he was sent in 1794.

At Paris he studied design under the great artist, David, who was an eminent painter. In 1789, at the age of seventeen, he returned to the United States and began a career of farm life on a farm given him by his father, in eastern Pennsylvania, but he kept up his favorite study of birds. He was married in 1808 to Miss Lucy Bakewell and sold his farm and engaged in business at Louisville, Ky. About two years later he resumed active study of birds and spent his time making extensive excursions through dense forests of the Southern and Southwestern States. He made colored drawings of all species of birds which he found. He removed with his family to Hendersonville on the Ohio River and remained there several years pursuing a study of the birds of the region frequently coming across the river into Indiana.

Mr. Audubon became in very poor circumstances. He had lost all his property and many times, the history of his life tells us, he was without a dollar to purchase the necessities for his family. He became a teacher and taught music, French, drawing, painting, dancing and fencing. In 1824, while on a visit to Philadelphia, he met Charles Lucien Bonaparte, who persuaded him to publish a work on ornithology. He went to London and began the work of publication in 1826. The work was not completed for more than ten years.

This excellent publication consisted of ten volumes, illustrated with 448 fine colored plates of 1,065 species of birds of natural size. The work was divided into two divisions of five volumes each of letter press and engravings. It is pronounced the most magnificent work ever published on ornithology. One hundred and forty-four persons subscribed for the work and it was the means of placing Audubon and his family in good circumstances. It is said that there are eighty copies of the book in America, each of which

would bring on the market now from $1,500 to $2,000. He was the first man to devote his life to the study of the birds of America and his works are known all over the world.

He visited back and forth several times between the United States and Europe in the interest of others of his publications, for he did not rest on the laurels of his first success, but he finally settled permanently on the Hudson River at Audubon Park, now a part of New York City, and died there January 27, 1851.

HISTORY AND CHARACTERISTICS OF SPECIAL BIRDS.

THE REDBIRD OR CARDINAL GROSSBEAK.

The redbird or cardinal grossbeak is of medium size, being about seven to nine inches in length from tip of tail to point of beak. It is a rich vermilion red color, slightly ashy on the back, black face and throat, reddish bill and brown feet. It is common in Indiana and appears most numerous in spring and fall. They nest in vines and bushes near the ground and brood more than once during the summer.

They appear in early March and begin their merry singing; both sexes sing, but the male is the better singer. They mate early and sing throughout their courtship and as late as September. The female does all the work, though the male is her constant companion in search of material. Because of the many features of beauty this bird is sought and trapped for cages. Its song is varied and long and makes it a pleasant captive, but such should be discouraged by all means. They should be allowed to vary green nature by their ruby presence.

THE REDBIRD.

Swept lightly by the south wind
The elm leaves softly stirred,
And in their pale green clusters
There straightway bloomed a bird!

His glossy feathers glistened
With dyes as richly red
As any tulip flaming
From out the garden bed.

But ah, unlike the tulips,
In joyous strain, ere long,
This redbird flower unfolded
A heart of golden song!

—Evaleen Stein.

THE BROWN THRASHER OR BROWN MOCKINGBIRD.

The brown thrasher is of medium size, about ten to twelve inches in length from point of tail to point of bill. It is a reddish brown color above but white streaked with dark brown below, and has two white bars on the wings. It nests in vines and bushes near the ground or sometimes on the ground. The nest is made of leaves, sticks and rootlets. The eggs, usually four to five in number, are greenish or soiled white in color, covered with brown-reddish dots.

The thrasher is a very shy, retiring bird in habit. In its travels it seeks the shelter of thickets and skulks through the close cover. It is seen earliest in river valleys, where it makes its appearance from the first of March to the middle of April. They mate early and return to their old haunts, where the male perches upon the topmost bough of the nearby trees and opens his serenade, which continues by the hour during the early morning and late afternoon. When the courtship is over the singing usually ceases and by June they are seldom seen.

THE BLUEBIRD.

The bluebird is a beautiful little creature of from five to seven inches in length. The males are bright blue color above, cinnamon on breast and throat and white below. They are common to Indiana, but the English sparrow has driven them away to a great extent. They are the first to appear on the approach of spring, having been seen in February in localities where they migrated.

The bluebird mates early and has been known to be nesting in April. They brood several times during the summer. It is a most domestic bird in habit and delights to nest in the orchard, garden, grove and yard. It builds its nest in the holes of trees and posts and will build in boxes prepared for it. Their eggs usually number four to six, and are small and pale blue in color. The food of this bird is insects mostly. Encourage it by offering it a house and protection.

THE BLUEBIRD.

I know the song that the bluebird is singing
Out in the apple tree, where he is swinging.
Brave little fellow! the skies may be dreary,
Nothing cares he while his heart is so cheery.
Hark! how the music leaps out from his throat;
Hark! was there ever so merry a note?

Listen a while and you'll hear what he's saying,
Up in the apple tree swinging and swaying.
"Dear little blossoms down under the snow,
You must be weary of Winter, I know;
Hark! while I sing you a message of cheer,
Summer is coming and spring time is here!

"Dear little snow-drop! I pray you arise;
Bright yellow crocus! come open your eyes;
Sweet little violets, hid from the cold,
Put on your mantles of purple and gold;
Daffodils! daffodils! say, do you hear,
Summer is coming and spring time is here!"

THE YELLOW THISTLE BIRD.

The American Goldfinch is known in some localities as "Yellow Bird" and Thistle Bird. They are found all year in this State. In summer the males wear attractive colors—bright yellow, with top of head, wings and tail black. The females are duller. In winter both sexes are duller than the females in summer. They fly through the air with a galloping motion, repeating their call "Per-chic-o-ree" as they go. They frequent lettuce patches, hemp stalks and thistles when the seed is ripe.

THE YELLOW THISTLE BIRD.

In the clearin', where the thistle, an' poke an' fireweed,
Place their feet among the ashes and sow their harvest seed,
Ther' the little yeller thistle bird goes swingin' through the sky,
Like they's ridin' on the ocean when the waves were wavin' high.
An' they look like dandelion blows, got loose and given wings
An' a voice (made up ter me, it seems, of the finest fiddle strings);
An' they dance among the posies with the snarlin' bumblebee,
Cuttin' up their shines an' capers, that make me laf to see.
An' there hain't a bird that's mean enough to tech the little mites,
An' I kinder think they're lookin' out ter see they get their rights.
They're like children in the clearin', playin' they was married folks,

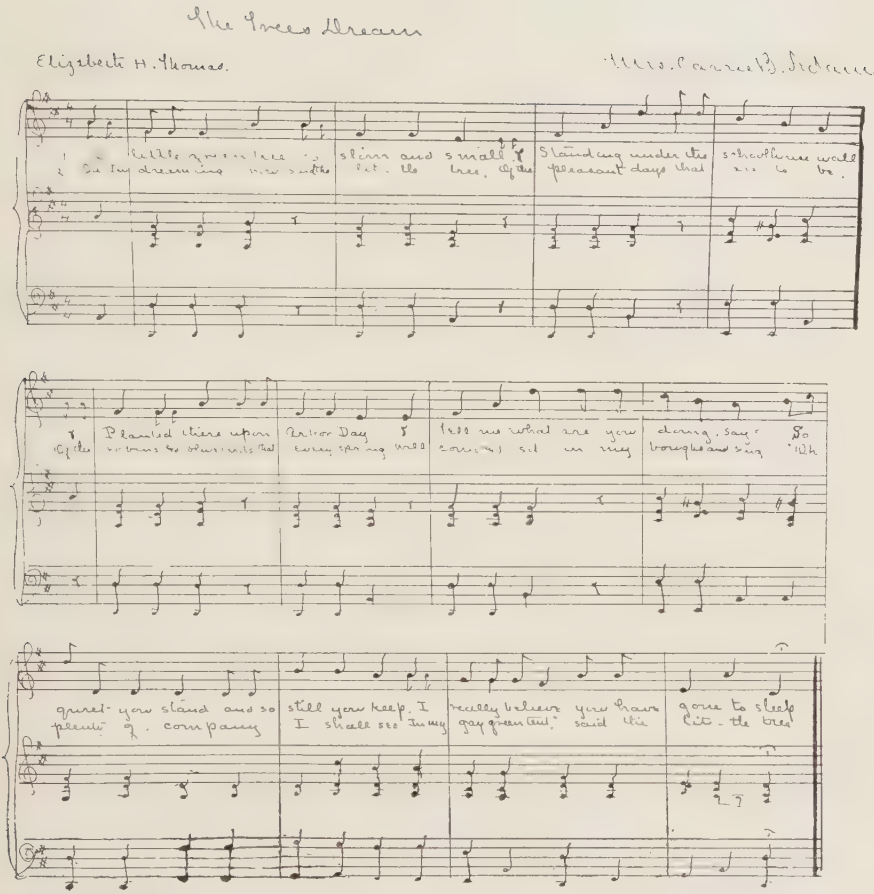
The Trees Dream
Elizabeth H. Thomas.
Mrs. Carrie B. Adams.
Planted there upon Arbor Day
Tell me what are you doing, say
quiet you stand and so still you keep. I really believe you have gone to sleep
plenty of company I shall see in my gay green tent," said the lit-the tree

Fig. 14.

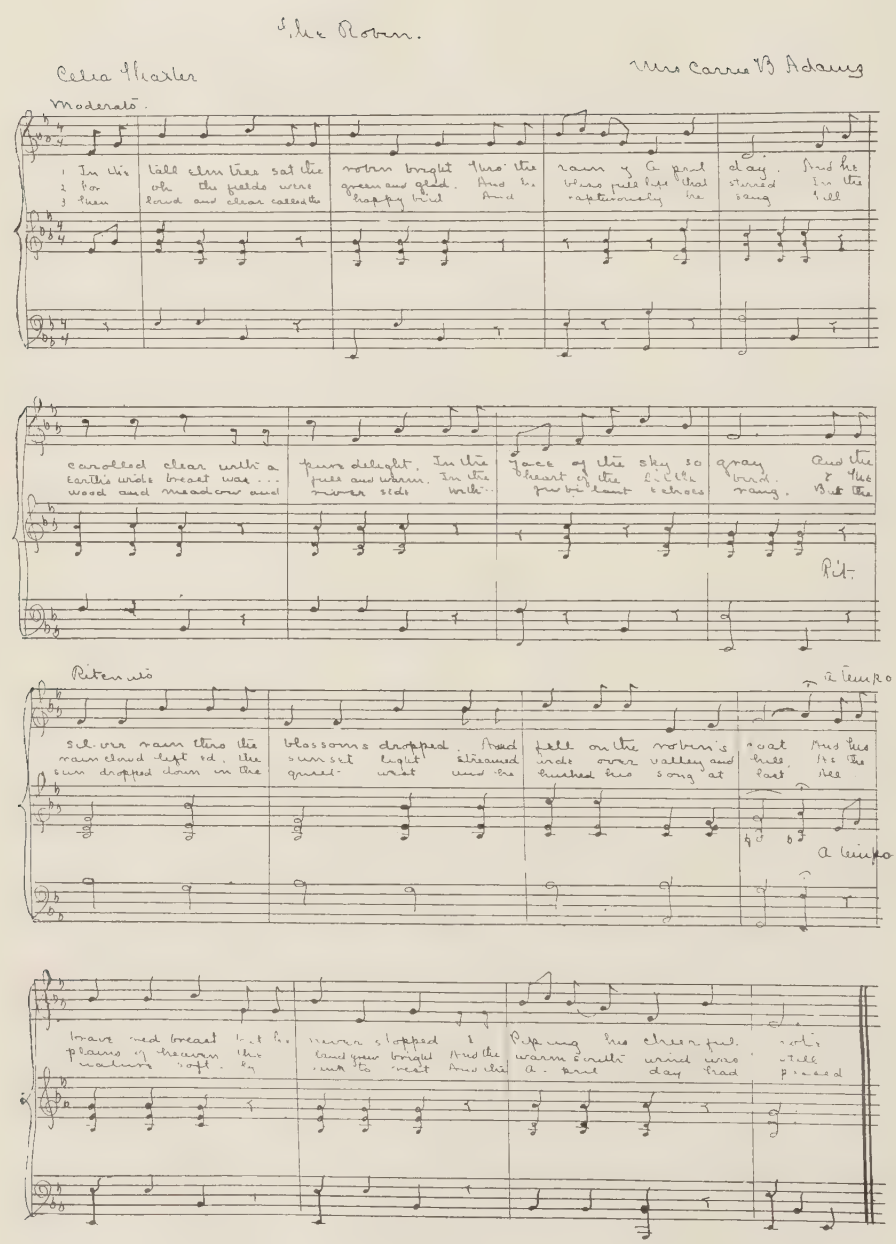
The Robin.
Celia Thaxter
Mrs Carrie B Adams
Moderato.
1 In the tall elm tree sat the robin bright thro' the rain of a pril day. And he
2 For oh the fields were green and glad. And he bliss full life that stirred In the
3 Then loud and clear called the happy bird And raptorously he sang till
carolled clear with a pure delight. In the face of the sky so gray And the
Earth's wide breast was... full and warm. In the heart of the little bird. & the
wood and meadow and river side with... jubilant echoes rang. But the
Rit.
Ritenuto
a tempo
silver rain thro the blossoms dropped. And fell on the robin's coat And his
rain cloud left ed. the sunset light streamed wide over valley and hill. As the
sun dropped down in the quiet west and he hushed his song at last All
a tempo
brave red breast but he never stopped & Piping his cheerful note
plains of heaven the land grew bright And the warm south wind was still
nature softly sank to rest And the a pril day had passed

Fig. 15.

For they never seem in airnest, but air allers full o' jokes.
An' they look so outer place like, 'mong the stumps'n' burnin' logs,
With the hot wind whirlin' madly till your very breath it clogs.
I stop sometimes to watch them, an' they rest me like a cup
Uv water cool and sparklin' jest from the spring dipped up;
An' sometimes my gold-haired baby, with my dinner in a pail,
Comes to me, an' I leave the wedge still stickin' in the rail—
An' we set down clost together like es if we's only one,
An' we eat 'n' laf, 'n' visit till ther' isn't left a crum'.
Then she wanders 'round the clearin' jest as busy as I am,
An' my work seems twice as easy, 'n' I feel so stout 'n' calm.
An' the yeller birds fly near her, jest es if they knowed her too,
An' wor hankerin' fer her lovin' es I half suspect they do;
While I get the birds 'n' babies all kinked up in my heart,
Fer when they're nigh about me, I kent keep them quite apart.
But the yeller birds keep singin', an' my gal has wandered home,
An' I get my thoughts untangled, which, sometimes, may like to roam.
They make me think of babies in a home wher' all the rest
Air old, 'n' gray, 'n' wrinkled, 'n' in ugly homespun drest,
Er a thought thet God made livin' when He blest the waitin' band
Of children, an' upon their heads he laid his lovin' hand.

- S. B. McManus.

Arbor Day will make the country visibly more beautiful year by year. Every school district will contribute to the good work. The schoolhouse will gradually become an ornament of the village, and the children will be put in the way of living upon more friendly and intelligent terms with the bountiful Nature which is so friendly to us.—George William Curtis.

Our yards, our schoolhouse yards, and the resting places of our dead, should not be neglected, but should be adorned with nature's own beautifiers—the trees.—Emma F. Bates.

A man does not plant a tree for himself; he plants it for posterity; and sitting idly in the sunshine, I think at times of the unborn people who will to some extent be indebted to me. Remember me kindly, ye future men and women.—Alexander Smith.

This public education renders possible the system of fruit trees by the roadside, the beautiful little park and flower garden at the railway station, and tree and shrub groupings and effects everywhere, such as we can not reach with our present public sentiment.—J. L. Budd.

The best and highest thing a man can do in a day is to sow a seed, whether it be in the shape of a word, an act or an acorn.—James Boyle O'Reilly.

OUTLINE PROGRAM.

1. Devotional Exercises.
   Song. Scripture Reading and Prayer. Song.
2. Reading Proclamation and Other Formal Documents.
3. Songs. Arbor and Bird Day.
4. Literary—
   Essays:
   a. Arbor Day and Purposes.
   b. Bird Day and Purposes.
   c. Benefits of Trees and Birds.
   d. How and When to Plant and Care for Trees.
   e. The Best Trees and Shrubs to Plant.
   Recitations:
   a. Poems About Trees, Birds, Flowers and Patriotism.
   b. Gems About Trees, Birds, Flowers and Patriotism.
   Songs:
   a. About Trees, Birds, Flowers and Patriotism.
5. Brief Reports of Observations by Pupils—
   a. Of Finely Ornamented Home Lawns.
   b. Of Finely Ornamented School Grounds.
   c. Of Finely Shaded Highways and Drives.
   d. Of Fine Specimen Trees Along Highways, on Lawns and in the Forest.
   e. Of Species of Trees in Home Forests.
   f. Of Dense Forest Tracts in the Vicinity.
6. Short Address—
   Our Duty in Planting Trees and Protecting Birds.
7. Organization of Pupils' Clubs for Planting Trees and Protecting Birds.
8. Planting and Dedication of Trees.

SUGGESTIONS FOR PROGRAMS.

1. Study the material, the conditions and possible participants available before formulating the exercises.

2. Make the program long enough to admit of pleasurable variety, but guard against such length as to kill interest. Diversity and conciseness should be the motto.

3. Have as many patrons as well as pupils on the program as possible. Appeal personally to patrons.

4. Give special emphasis to poems, gems, songs and reports by pupils. Have them commit and speak.

5. Have holes for trees made large and filled with rich soil (not light loam) several days beforehand.

6. Have the club appoint a committee to see that the trees planted are watered and cared for during the year.

7. Select a person for the address who can talk in the realm of the children and is personally liked by them.

III. School Statistics, 1901.

1. The Funds—
   (a) Common school.
   (b) Congressional.
2. Revenues.
3. Enumeration, Enrollment and Attendance.
4. Number of School Houses.
5. Teachers Employed.
6. Wages.
7. School Maintenance—
   (a) Tuition.
   (b) Special School.
8. Buildings Erected.
9. Length of School Term.
10. Libraries and Reading Circles.
11. Institutes.
12. Amount Paid Town and City Trustees for Managing Educational Work.
13. Summaries.

(a.) COMMON SCHOOL FUND, 1901.

Number.	COUNTIES.	Amount Held by Counties as Reported June, 1900.	Added by Fines from County Clerks, 1901.	Added by Fines from Justices of the Peace, 1901.	Added from All Other Sources, June, 1901.	Amount Held by Counties, 1901.	Increase in Common School Fund, 1901.
1	Adams	$58,051 73	$115 50			$58,167 23	$115 50
2	Allen	200,495 44	94 00	$1,679 44		202,268 88	2,773 44
3	Bartholomew	85,467 79		48 76		85,516 55	48 76
4	Benton	39,888 17	134 00	116 11		40,138 28	250 11
5	Blackford	39,008 79	19 70	470 30	$13 26	39,512 05	503 26
6	Boone	99,335 19	73 00	221 67		99,629 86	294 67
7	Brown	33,364 32		12 00	4 32	33,380 64	16 32
8	Carroll	66,701 61		95 87	270 00	67,067 48	365 87
9	Cass	106 670 32	5 00	118 05		106,793 37	123 05
10	Clark	97 746 33	285 00	163 72		98,195 05	448 72
11	Clay	94,759 39		182 63		94,942 02	182 63
12	Clinton	93,025 57	116 00	135 02	688 41	93,965 00	939 43
13	Crawford	45,443 85	42 50	162 13		45,648 48	204 63
14	Daviess	84,308 34	206 00	249 97	113 00	84,877 31	568 97
15	Dearborn	102,215 03	127 00	62 06		102,404 09	189 06
16	Decatur	83,336 45	93 01	109 76		83,539 22	202 77
17	Dekalb	81,284 78	205 35	207 48		81,697 61	412 73
18	Delaware	112 893 29	918 45	1,278 60		115,090 34	2,197 05
19	Dubois	70,765 69	644 00	149 50		71,559 19	793 50
20	Elkhart	128,788 08	127 00	557 80		129,472 88	684 80
21	Fayette	51,743 38	177 00	14 00	31 06	51,965 44	222 06
22	Floyd	86,708 18	15 00			86,723 18	15 00
23	Fountain	72,735 32		136 01		72,871 33	136 01
24	Franklin	76,499 17	214 00	87 50	3 00	76,803 67	304 50

(a.) COMMON SCHOOL FUND, 1901—Continued.

Number.	COUNTIES.	Amount Held by Counties as Reported June, 1900.	Added by Fines from County Clerks, 1901.	Added by Fines from Justices of the Peace, 1901.	Added from All Other Sources, June, 1901.	Amount Held by Counties, 1901.	Increase in Common School Fund, 1901.
25	Fulton	$52,426 91	$50 00	$18 00	. . . . .	$52,494 91	$68 00
26	Gibson	91,034 90	193 00	364 28	. . . . .	91,592 18	557 28
27	Grant	116,685 75	85 20	881 91	$709 00	118,361 86	1,676 11
28	Greene	92,848 10	. . . . .	125 26	50 00	93,023 36	175 26
29	Hamilton	91,781 92	. . . .	322 00	. . . . .	92,103 92	322 00
30	Hancock	67,939 37	361 00	182 00	. . . . .	68,482 37	543 00
31	Harrison	74,033 84	. . . . .	127 76	24 00	74,185 60	151 76
32	Hendricks	85,387 50	38 50	69 52	. . . . .	85,495 52	108 02
33	Henry	104,525 69	306 00	449 45	. . . . .	105,281 14	755 45
34	Howard	77,425 45	. . . .	118 95	92 75	77,637 15	211 70
35	Huntington	86,086 95	50 00	192 00	. . . . .	86,328 95	242 00
36	Jackson	85,435 12	139 60	207 00	. . . . .	85,781 72	346 60
37	Jasper	36,616 58	300 00	41 00	3 60	36,961 18	344 60
38	Jay	79,116 09	262 60	203 60	. . . . .	79,581 69	465 60
39	Jefferson	109,929 47	365 35	168 58	. . . . .	110,463 40	533 93
40	Jennings	58,666 37	. . . . .	232 12	. . . . .	58,898 49	232 12
41	Johnson	76,476 26	52 00	122 03	. . . . .	76,650 29	174 03
42	Knox	114,633 89	. . . .	872 91	. . . .	115,506 80	872 91
43	Kosciusko	102,305 92	476 14	186 00	2 00	103,070 06	664 14
44	Lagrange	56,838 26	42 00	62 00	. . . . .	56,942 26	104 00
45	Lake	72,453 37	939 00	332 09	214 64	73,940 10	1,486 73
46	Laporte	108,928 38	65 00	142 90	. . . . .	109,136 28	207 90
47	Lawrence	67,291 99	467 51	356 53	. . . . .	68,116 03	824 04
48	Madison	108,517 91	. . . . .	491 01	. . . . .	109,008 92	491 01
49	Marion	474,448 48	. . . .	294 03	. . . . .	474,742 51	294 03
50	Marshall	81,374 23	61 00	. . . . .	. . . . .	81,435 23	61 00
51	Martin	41,377 44	383 07	103 19	. . . . .	41,863 70	486 26
52	Miami	98,742 68	348 65	43 00	. . . . .	99,134 33	391 65

53	Monroe	64,122 69	139 00	112 60	64 50	64,438 19	315 50
54	Montgomery	115,948 82	119 60	424 45		116,492 87	544 05
55	Morgan	77,611 02				77,611 02	
56	Newton	25,628 13	81 00	106 50		25,715 63	187 50
57	Noble	84,046 37	58 00	66 82		84,171 19	124 82
58	Ohio	24,511 47				24,511 47	
59	Orange	52,281 08	155 76	361 50		52,798 34	517 26
60	Owen	64,689 52		98 85		64,788 37	98 85
61	Parke	71,184 93		343 79		71,528 72	343 79
62	Perry	62,636 74	41 00	73 07		62,750 81	114 07
63	Pike	67,561 42	700 00	245 50		68,506 92	945 50
64	Porter	62,762 92		77 01	100 00	62,939 93	177 01
65	Posey	107,477 09		71 31	107 28	107,655 68	178 59
66	Pulaski	32,886 51	27 01	28 40		32,941 92	55 41
67	Putnam	94,045 64	155 00	125 26	200 00	94,525 90	480 26
68	Randolph	117,865 08		110 00		117,975 08	110 00
69	Ripley	84,808 00	79 90	138 88		85,026 78	218 78
70	Rush	86,632 56	140 96			86,773 52	140 96
71	Scott	29,686 09	32 00	58 70		29,776 79	90 70
72	Shelby	97,195 67	37 00	363 93		97,596 60	400 93
73	Spencer	79,272 51	68 00	78 51		79,419 02	146 51
74	Starke	19,727 54	10 01			19,737 55	10 01
75	St. Joseph	129,355 28	5 00	1,850 70		131,190 98	1,855 70
76	Steuben	52,273 66		371 00		52,644 66	371 00
77	Sullivan	84,106 66	162 00	393 19		84,661 85	555 19
78	Switzerland	51,250 35	22 00	69 00	7 64	51,348 99	98 64
79	Tippecanoe	144,755 62	60 00	232 40		145,048 02	292 40
80	Tipton	55,795 10	596 50	189 75		56,581 35	786 25
81	Union	34,368 03	15 00			34,383 03	15 00
82	Vanderburgh	217,421 98	597 40	836 68		218,856 07	1,434 09
83	Vermillion	56,249 57	75 00	77 01		56,401 58	152 01
84	Vigo	163,589 95		507 02		164,096 97	507 02
85	Wabash	99,301 84		302 79		99,604 63	302 79
86	Warren	46,744 78		45 51		46,790 29	45 51
87	Warrick	76,148 86	27 00	102 01		76,277 87	129 01
88	Washington	73,925 72	84 00	127 00		74,136 72	211 00
89	Wayne	177,596 82	69 00	924 50		178,590 32	993 50
90	Wells	69,367 40	120 00	133 50		69,620 90	253 50
91	White	48,449 57		52 40		48,501 97	52 40
92	Whitley	60,683 90		28 00		60,711 90	28 00
	Total	$7,888,511 92	$12,273 67	$22,095 45	$2,698 46	$7,925,579 50	$37,067 58

(*b.*) CONGRESSIONAL TOWNSHIP FUND.

Number.	COUNTIES.	Number Acres Unsold Land.	Value.	Amount of Fund Held by Counties, 1900.	Amount Since Added from Sale of Land.	Amount Added from Other Sources.	Total.	Deduct Amount to Other Counties and from Errors.	Total Fund, 1901.
1	Adams			$18,740 38			$18,740 38		$18,740 38
2	Allen			56,324 66			56,324 66		56,324 66
3	Bartholomew			57,545 76			57,545 66		57,545 76
4	Benton			38,441 83			38,441 83		38,441 83
5	Blackford			8,124 49	$6 74		8,131 23		8,131 23
6	Boone			27,034 33			27,034 33		27,034 33
7	Brown			9,119 25			9,119 25		9,119 25
8	Carroll			32,912 58			32,912 58		32,912 58
9	Cass			31,839 08			31,839 08		31,839 08
10	Clark			18,263 08			18,263 08		18,263 08
11	Clay			10,864 72			10,864 72		10,864 72
12	Clinton			26,940 22½			26,940 22½		26,940 22½
13	Crawford			11,686 85			11,686 85		11,686 85
14	Daviess			20,222 89			20,222 89		20,222 89
15	Dearborn			27,906 59			27,906 59		27,906 59
16	Decatur			20,357 60			20,357 60		20,357 60
17	Dekalb			17,684 00			17,684 00		17,684 00
18	Delaware			19,198 18			19,198 18		19,198 18
19	Dubois			16,219 74			16,219 74		16,219 74
20	Elkhart			46,268 68			46,268 68		46,268 68

21	Fayette			19,136 81			19,136 81	$1,187 00	17,949 81
22	Floyd			22,688 50			22,688 50		22,688 50
23	Fountain			26,232 05			26,232 05		26,232 05
24	Franklin			57,718 32			57,718 32		57,718 32
25	Fulton			21,832 73			21,832 73		21,832 73
26	Gibson			34,476 62			34,476 62		34,476 62
27	Grant			28,127 88			28,127 88		28,127 88
28	Greene			18,511 72			18,511 72		18,511 72
29	Hamilton			29,497 16			29,497 16		29,497 16
30	Hancock			10,317 84			10,317 84		10,317 84
31	Harrison			31,903 99			31,903 99		31,903 99
32	Hendricks			23,673 77			23,673 77		23,673 77
33	Henry			22,702 94			22,702 94		22,702 94
34	Howard			22,235 65			22,235 65		22,235 65
35	Huntington			35,384 12			35,384 12		35,384 12
36	Jackson			16,260 29			16,260 29		16,260 29
37	Jasper	640	$7,000 00	48,411 93			48,411 93		48,411 93
38	Jay			22,601 49			22,601 49		22,601 49
39	Jefferson			32,046 20			32,046 20		32,046 20
40	Jennings			12,125 39			12,125 39		12,125 39
41	Johnson			17,843 28			17,843 28		17,843 28
42	Knox			41,520 41			41,520 41		41,520 41
43	Kosciusko			27,303 48			27,303 48		27,303 48
44	Lagrange			17,576 80			17,576 80		17,576 80
45	Lake			33,154 75			33,154 75		33,154 75
46	Laporte			55,299 35			55,299 35		55,299 35
47	Lawrence			14,969 20			14,969 20		14,969 20
48	Madison			24,976 17			24,976 17		24,976 17
49	Marion			16,571 01			16,571 01		16,571 01
50	Marshall			21,589 71			21,589 71		21,589 71
51	Martin			13,260 43			13,260 43		13,260 43
52	Miami			30,663 86			30,663 86		30,663 86
53	Monroe			32,988 10			32,988 10		32,988 10
54	Montgomery			22,884 30			22,884 30		22,884 30
55	Morgan			19,742 06			19,742 06		19,742 06
56	Newton	160	1,600 00	48,268 49			48,268 49		48,268 49

(*b.*) CONGRESSIONAL TOWNSHIP FUND—Continued.

Number.	COUNTIES.	Number Acres Unsold Land.	Value.	Amount of Fund Held by Counties, 1900.	Amount Since Added from Sale of Land.	Amount Added from Other Sources.	Total.	Deduct Amount to Other Counties and from Errors.	Total Fund, 1901.
57	Noble			$19,850 17			$19,850 17		$19,850 17
58	Ohio			10,494 09			10,494 09		10 494 09
59	Orange			13,265 49			13,265 49		13,265 49
60	Owen			18,550 20			18,550 20		18,550 20
61	Parke			34,485 77			34,485 77		34,485 77
62	Perry			33,226 90			33,226 90		33,226 90
63	Pike			16,807 37			16,807 37		16,807 37
64	Porter			24,848 79			24,848 79		24 848 79
65	Posey			39,925 00			39,925 00		39,925 00
66	Pulaski			25,207 60			25,207 60		25,207 60
67	Putnam			24,785 82			24,785 82		24,785 82
68	Randolph			33,145 81		$615 74	33,761 55	$51 60	33,709 95
69	Ripley			18,651 59			18,651 59		18,651 59
70	Rush			23,225 76			23,225 76		23,225 76
71	Scott			8,553 54			8,553 54		8,553 54
72	Shelby			18,050 21			18,050 21		18,050 21
73	Spencer			26,226 70			26,226 70	105 19	26,121 51
74	Starke			15,073 39	$1 74		15,075 13		15,075 13
75	St. Joseph			36,416 14			36,416 14		36,416 14
76	Steuben			16,774 68			16,774 68		16,774 68
77	Sullivan			15,462 26			15,462 26		15,462 26
78	Switzerland			18,792 19			18,792 19		18,792 19
79	Tippecanoe			39,287 03			39,287 03		39,287 03
80	Tipton			28,512 84			28,512 84		28,512 84
81	Union			28,678 88			28,678 88		28,678 88
82	Vanderburgh	$308.60	$24,688 00	21,290 78			21,290 78		21,290 78
83	Vermillion			33,953 67			33,953 67		33,953 67
84	Vigo			57,159 52			57,159 52		57,159 52

85	Wabash			32,621 35			32,621 35		32,621 35
86	Warren			57,884 44			57,884 44		57,884 44
87	Warrick			20,631 66		105 19	20,736 85		20,736 85
88	Washington			28,506 56			28,506 56		28,506 56
89	Wayne			44,191 26			44,191 26		44,191 26
90	Wells			25,793 59		43 64	25,837 23		25,837 23
91	White			46,950 44			46,950 44		46,950 44
92	Whitley			17,844 37			17,844 37		17,844 37
	Total	1,108.60	$33,288 00	$2,465,317 57	$8 48	$764 57	$2,466,090 62	$1,343 79	$2,464,746 83

1. FUNDS, 1901—Continued.

CONDITION COMMON SCHOOL FUND.

Number.	COUNTIES.	Amount of Funds Safely Invested.	Amount of Funds Unsafely Invested.	Amount not Invested and in County Treasury.	Total.
1	Adams	$56,956 14		$1,211 09	$58,167 23
2	Allen	191,358 50	$2,390 00	8,520 38	202,268 88
3	Bartholomew	81,713 59		3,802 96	85,516 55
4	Benton	34,755 73		5,382 55	40,138 28
5	Blackford	37,381 64		2,130 41	39,512 05
6	Boone	76,958 60		22,671 26	99,629 86
7	Brown	32,934 45		446 19	33,380 64
8	Carroll	64,276 25	95 00	2,696 23	67,067 48
9	Cass	106,266 90		526 47	106,793 37
10	Clark	88,656 53	7,463 30	2,075 22	98,195 05
11	Clay	88,815 84		6,126 18	94,942 02
12	Clinton	91,762 42		2,202 58	93,965 00
13	Crawford	43,326 48	2,256 70	65 30	45,648 48
14	Daviess	83,498 66		1,378 65	84,877 31
15	Dearborn	95,565 18		6,838 91	102,404 09
16	Decatur	78,717 53		4,821 69	85,539 22
17	Dekalb	78,179 66		3,517 95	81,697 61
18	Delaware	114,377 03	635 00	78 31	115,090 34
19	Dubois	70,080 13		1,479 06	71,559 19
20	Elkhart	129,472 88			129,472 88
21	Fayette	48,755 00		3,210 44	51,965 44
22	Floyd	85,550 19		1,172 99	86,723 18
23	Fountain	65,640 95	725 00	6,505 38	72,871 33
24	Franklin	73,556 71	1,172 11	2,074 85	76,803 67
25	Fulton	51,004 41		1,490 50	52,494 91
26	Gibson	88,878 64		2,713 54	91,592 18
27	Grant	113,277 50		5,084 36	118,361 86
28	Greene	90,711 15		2,312 21	93,023 26
29	Hamilton	88,644 35	1,100 00	2,359 57	92,103 92
30	Hancock	67,139 02		1,343 35	68,482 37
31	Harrison	70,812 05	2,000 00	1,373 55	74,185 60
32	Hendricks	75,615 05		9,880 47	85,495 52
33	Henry	92,448 78	300 00	12,532 36	105,281 14
34	Howard	66,201 32		11,435 83	77,637 15
35	Huntington	78,571 60		7,757 35	86,328 95
36	Jackson	84,100 75		1,680 67	85,781 72
37	Jasper	36,065 43		895 75	36,961 18
38	Jay	62,963 83	1,150 00	15,467 86	79,581 69
39	Jefferson	110,055 50		407 90	110,463 40
40	Jennings	54,750 91	2,076 84	2,070 74	58,898 49
41	Johnson	73,214 71		3,435 58	76,650 29
42	Knox	110,513 89		4,992 91	115,506 80
43	Kosciusko	100,962 20		2,107 86	103,070 06
44	Lagrange	39,133 70		17,808 56	56,942 26
45	Lake	62,958 32		10,981 78	73,940 10
46	Laporte	84,310 69		24,825 59	109,136 28
47	Lawrence	63,614 98		4,501 05	68,116 03
48	Madison	99,954 18	3,050 00	6,004 74	109,008 92

CONDITION COMMON SCHOOL FUND—Continued.

Number.	COUNTIES.	Amount of Funds Safely Invested.	Amount of Funds Unsafely Invested.	Amount not Invested and in County Treasury.	Total.
49	Marion	$397,142 07		$77,600 44	$474,742 51
50	Marshall	75,760 98		5,674 25	81,435 23
51	Martin	41,863 70			41,863 70
52	Miami	94,869 90		4,264 43	99,134 33
53	Monroe	60,761 93	$2,500 00	1,176 26	64,438 19
54	Montgomery	65,296 32		51 196 55	116,492 87
55	Morgan	76,167 74		1,443 58	77,611 02
56	Newton	25,007 48		708 15	25,715 63
57	Noble	73,202 98		10,968 21	84,171 19
58	Ohio	23,745 30		766 17	24,511 47
59	Orange	52,052 14		746 20	52,798 34
60	Owen	59,808 67		4,979 70	64,788 37
61	Parke	70,278 81		1,249 91	71,528 72
62	Perry	55,690 93	4,770 88	2,289 00	62,750 81
63	Pike	67,121 43		1,385 49	68,506 92
64	Porter	61,681 38		1,258 55	62,939 93
65	Posey	106,240 65		1,415 03	107,655 68
66	Pulaski	32,522 95		418 97	32,941 92
67	Putnam	93,890 51	100 00	535 39	94,525 90
68	Randolph	96,343 66		21,631 42	117,975 08
69	Ripley	78,631 72	1,000 00	5,665 06	85,026 78
70	Rush	79,306 72		7,466 80	86,773 52
71	Scott	29,421 76		355 03	29,776 79
72	Shelby	92,075 67	205 00	5,315 93	97,596 60
73	Spencer	78,685 39		733 63	79,419 02
74	Starke	19,176 54		561 01	19,737 55
75	St. Joseph	108,830 00		22,360 98	131,190 98
76	Steuben	50,495 51		2,149 15	52,644 66
77	Sullivan	84,263 99		397 86	84,661 85
78	Switzerland	50,208 40		1,140 59	51,348 99
79	Tippecanoe	143,767 67		1,280 35	145,048 02
80	Tipton	56,581 35			56,581 35
81	Union	31,787 00		2,596 03	34,383 03
82	Vanderburgh	208,515 64		10,340 43	218,856 07
83	Vermillion	55,524 83		876 75	56,401 58
84	Vigo	163,789 71		307 26	164,096 97
85	Wabash	99,604 63			99,604 63
86	Warren	46,660 29		130 00	46,790 29
87	Warrick	75,695 04		582 83	76,277 87
88	Washington	71,070 35		3,066 37	74,136 72
89	Wayne	145,145 35		33,444 97	178,590 32
90	Wells	69,620 90			69,620 90
91	White	46,477 00		2,024 97	48,501 97
92	Whitley	59,684 21		1,027 69	60,711 90
	Total	$7,358,658 85	$32,989 83	$533,930 82	$7,925,579 50

FUNDS, 1901—Continued.

CONDITION CONGRESSIONAL TOWNSHIP FUND.

Number.	COUNTIES.	Amount of Funds Safely Invested.	Amount of Funds Unsafely Invested.	Amount not Invested and in County Treasury.	Total.
1	Adams	$18,134 84		$605 54	$18,740 38
2	Allen	53,784 68		2,539 98	56,324 66
3	Bartholomew	54,609 82		2,935 94	57,545 76
4	Benton	25,883 17		12,558 66	38,441 83
5	Blackford	7,730 65		400 58	8,131 23
6	Boone	19,481 00		7,553 33	27,034 33
7	Brown	8,744 18		375 07	9,119 25
8	Carroll	30,811 11	$225 00	1 876 47	32,912 58
9	Cass	28,838 56		3,000 52	31,839 08
10	Clark	17,027 01	1,153 20	82 87	18,263 08
11	Clay	10,864 72			10,864 72
12	Clinton	26,402 47½		537 75	26,940 22½
13	Crawford	11,270 05		416 80	11,686 85
14	Daviess	18,614 81		1,608 08	20,222 89
15	Dearborn	25,905 75		2,000 84	27,9 6 59
16	Decatur	16,175 00		4,182 60	20,357 60
17	Dekalb	16,406 09		1,277 91	17,684 00
18	Delaware	18,438 07		760 11	19,198 18
19	Dubois	15,529 02		690 72	16,219 74
20	Elkhart	43,846 46		2,422 22	46,268 68
21	Fayette	16,405 00		1,544 81	17,949 81
22	Floyd	21,924 27		764 23	22,688 50
23	Fountain	24,580 87	1,294 80	356 38	26,232 05
24	Franklin	53,762 29	1,130 00	2,826 03	57,718 32
25	Fulton	21,322 73		510 00	21,832 73
26	Gibson	32,400 67		2,075 95	34,476 62
27	Grant	27,480 00		647 88	28,127 88
28	Greene	18,511 72			18,511 72
29	Hamilton	27,624 61	262 50	1,610 05	29,497 16
30	Hancock	10,185 98		131 86	10,317 84
31	Harrison	28,901 48	1,500 00	1,502 51	31,903 99
32	Hendricks	15,963 55		7,710 22	23,673 77
33	Henry	17,866 56		4,836 38	22,702 94
34	Howard	21,716 42		519 23	22,235 65
35	Huntington	29,097 00		6,287 12	35,384 12
36	Jackson	15,501 25	200 00	559 04	16,260 29
37	Jasper	47,438 27		973 66	48,411 93
38	Jay	18,629 18		3,972 31	22,601 49
39	Jefferson	25,925 48		6,120 72	32,046 20
40	Jennings	10,675 00	974 23	476 16	12,125 39
41	Johnson	15,020 64		2,822 64	17,843 28
42	Knox	40,239 29		1,281 12	41,520 41
43	Kosciusko	26,326 63		976 85	27,303 48
44	Lagrange	12,119 65		5,457 15	17,576 80
45	Lake	24,250 35		8,904 40	33,154 75
46	Laporte	29,917 00		25,382 35	55,299 35
47	Lawrence	14,472 04		497 16	14,969 20
48	Madison	24,051 87		924 30	24,976 16

CONDITION CONGRESSIONAL TOWNSHIP FUND—Continued.

Number.	COUNTIES.	Amount of Funds Safely Invested.	Amount of Funds Unsafely Invested.	Amount not Invested and in County Treasury.	Total.
49	Marion	$10,531 24	. . . . .	$6,039 77	$16,571 01
50	Marshall	21,271 98	. . . . .	317 73	21,589 71
51	Martin	11,777 30	. . . . .	1,483 13	13,260 43
52	Miami	25,544 46	. . . . .	5,119 40	30,663 86
53	Monroe	30,316 77	$1,945 50	725 83	32,988 10
54	Montgomery	13,976 34	. . . . .	8 907 96	22,884 30
55	Morgan	19,377 65	. . . . .	364 41	19,742 06
56	Newton	43,464 70	. . . . .	4,803 79	48,268 49
57	Noble	18,247 75	. . . . .	1,602 42	19,850 17
58	Ohio	10,105 17	. . . . .	388 92	10,494 09
59	Orange	13,025 94	. . . . .	239 55	13,265 49
60	Owen	18,419 90	. . . . .	130 30	18,550 20
61	Parke	34,316 71	. . . . .	169 06	34,485 77
62	Perry	27,227 44	4,726 20	1,273 26	33,226 90
63	Pike	16,707 37	. . . . .	100 00	16,807 37
64	Porter	22,441 40	. . . . .	2,407 39	24,848 79
65	Posey	39,925 00	. . . . .	. . . . .	39,925 00
66	Pulaski	25,010 76	. . . . .	196 84	25,207 60
67	Putnam	23,788 00	. . . . .	997 82	24,785 82
68	Randolph	21,850 11	. . . . .	11,859 84	33,709 95
69	Ripley	13,763 08	. . . . .	4,888 51	18,651 59
70	Rush	17,292 14	750 00	5,183 62	23,225 76
71	Scott	8,404 02	. . . . .	149 52	8,553 54
72	Shelby	17,183 70	. . . . .	866 51	18,050 21
73	Spencer	24,883 35	87 50	1,150 66	26,121 51
74	Starke	14,960 89	. . . . .	114 24	15,075 13
75	St. Joseph	25,202 00	. . . . .	11,214 14	36,416 14
76	Steuben	16,467 43	. . . . .	307 25	16,774 68
77	Sullivan	15,462 26	. . . . .	. . . . .	15,462 26
78	Switzerland	17,950 68	. . . . .	841 51	18,792 19
79	Tippecanoe	36,119 25	. . . . .	3,167 78	39,287 03
80	Tipton	28,151 75	. . . . .	361 09	28,512 84
81	Union	23,553 12	. . . . .	5,125 76	28,678 88
82	Vanderburgh	10,385 59	. . . . .	10,905 19	21,290 78
83	Vermillion	33,012 67	. . . . .	941 00	33,953 67
84	Vigo	56,246 88	. . . . .	912 64	57,159 52
85	Wabash	32,069 64	. . . . .	551 71	32,621 35
86	Warren	54,432 38	93 00	3,359 06	57,884 44
87	Warrick	20,360 79	. . . . .	376 06	20,736 85
88	Washington	27,869 36	. . . . .	637 20	28,506 56
89	Wayne	26,262 21	. . . . .	17,929 05	44,191 26
90	Wells	20,998 87	. . . . .	4,838 36	25,837 23
91	White	44,997 43	. . . . .	1,953 01	46,950 44
92	Whitley	16,909 93	. . . . .	934 44	17,844 37
	Total	$2,191,072 67	$14,341 93	$259,332 23	$2,464,846 83

2. SCHOOL REVENUE, 1901.

TUITION REVENUE, JANUARY DISTRIBUTION, 1901.

Number.	COUNTIES.	Congressional Township Revenue.	Common School Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Total Distributed.
1	Adams	$373 91	$9,497 16	$5,501 82	. .	$15,372 89
2	Allen	2,180 22	29,430 16	18,306 09	$11,400 00	61,316 47
3	Bartholomew	1,327 14	10,471 91	12,391 95	1,900 00	26,091 00
4	Benton	827 16	4,972 40	12,233 28	2,100 00	20,132 84
5	Blackford	437 47	6,328 96	7,470 93	1,600 00	15,837 36
6	Boone	821 10	9,752 60	12,328 57	1,200 00	24,102 27
7	Brown	150 27	4,163 92	1,735 29	. . .	6,049 48
8	Carroll	1,224 75	7,707 84	12,192 76	900 00	22,025 35
9	Cass	651 54	12,697 60	13,426 63	2,400 00	29,175 77
10	Clark	769 15	11,878 96	11,183 72	5,283 35	29,115 18
11	Clay	325 94	14,160 80	5,816 28	5,800 00	26,103 02
12	Clinton	518 80	10,417 24	15,859 88	1,300 00	28,095 92
13	Crawford	377 97	6,202 48	1,289 62	900 00	8,770 07
14	Daviess	463 37	12 381 40	7,065 46	3,000 00	22,910 23
15	Dearborn	987 60	8,624 20	7,372 19	2,600 00	19,583 99
16	Decatur	751 93	7,127 52	12,525 94	1,776 63	22,182 02
17	Dekalb	461 04	9,449 88	8,091 86	1,400 00	19,402 78
18	Delaware	1,151 89	20,779 68	24,715 54	5,000 00	51,647 11
19	Dubois	973 18	9,364 48	2,679 34	3,000 00	16,017 00
20	Elkhart	1,388 06	15,767 84	18,627 90	4,800 00	40,583 80
21	Fayette	329 21	4,361 08	. . .	1,600 00	6,290 29
22	Floyd	532 41	10,808 08	4,777 22	5,450 00	21,567 71
23	Fountain	507 46	8,200 12	10,604 70	2,200 00	21,512 28
24	Franklin	2,478 56	6,274 40	5,047 66	1,000 00	14,800 62
25	Fulton	659 96	6,776 60	7,324 47	600 00	15,361 03
26	Gibson	1,034 30	12,197 88	12,421 41	1,300 00	26,953 59
27	Grant	620 37	19,925 56	23,571 97	6,200 00	50,317 90
28	Greene	287 25	11,637 40	7,762 75	2,521 00	22,208 40
29	Hamilton	1,064 51	11,295 16	12,679 02	1,100 00	26,138 69
30	Hancock	499 06	7,190 76	11,032 30	1,400 00	20,122 12
31	Harrison	858 81	8,852 12	4,989 40	1,200 00	15,900 33
32	Hendricks	751 19	7,789 68	13,895 27	400 00	22,836 14
33	Henry	925 35	8,894 87	15,889 49	1,900 00	27,609 71
34	Howard	667 07	10,573 48	12,669 40	2,600 00	26,509 95
35	Huntington	1,083 46	10,889 04	13,227 39	2,900 00	28,099 89
36	Jackson	347 93	10,451 96	6,869 06	2,700 00	20,368 95
37	Jasper	834 40	5,775 92	9,080 76	1.000 00	16 691 08
38	Jay	856 09	10,460 64	7,304 37	1,477 51	20,098 61
39	Jefferson	792 05	8,776 36	5,772 06	2,950 00	18,290 47
40	Jennings	100 97	5,945 80	5,433 41	1,300 00	12,780 18
41	Johnson	535 30	7,520 60	11,816 53	800 00	20,672 43
42	Knox	1,761 22	13,883 04	9,497 85	4,116 68	29,258 79
43	Kosciusko	642 94	10,985 16	13,228 83	1,300 00	26,156 93
44	Lagrange	890 02	5,699 04	7,531 98	1,100 00	15,221 04
45	Lake	1,521 68	13,857 00	14,919 42	17,350 00	47,648 10
46	Laporte	1,496 72	14,113 68	17,882 49	6,400 00	39 892 89
47	Lawrence	449 08	9,246 16	8,568 99	1,400 00	19,667 23
48	Madison	748 46	25,680 40	32,322 27	9,700 00	68,451 13

TUITION REVENUE, JANUARY DISTRIBUTION, 1901—Continued.

Number.	COUNTIES.	Congressional Township Revenue.	Common School Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Total Distributed.
49	Marion	$774 69	$59,108 34	$227,275 56	$27,980 09	$315,138 68
50	Marshall	695 38	10,158 08	10,390 90	1,300 00	22,544 36
51	Martin	795 62	6,177 78	2,374 38	300 00	9,647 78
52	Miami	882 19	11,200 57	14,146 26	2,000 00	28,229 02
53	Monroe	1,310 49	7,937 24	6,637 05	500 00	16,384 78
54	Montgomery	966 73	10,357 72	19,272 84	2,100 00	32,697 29
55	Morgan	1,184 52	7,427 18	11,389 80	1,200 00	21,201 50
56	Newton	1,448 05	3,996 52	9,004 47	1,000 00	15,449 04
57	Noble	634 88	8,154 24	9,750 30	2,000 00	20,539 42
58	Ohio	222 65	1,801 72	1,974 53	400 00	4,398 90
59	Orange	412 17	6,878 18	3,572 56	1,061 50	11,924 41
60	Owen	746 48	6,183 88	5,618 03	800 00	13,348 39
61	Parke	778 25	8,580 80	11,567 25	2,000 00	22,926 30
62	Perry	894 84	8,387 36	1,115 08	1,400 00	11,797 28
63	Pike	571 96	8,502 68	4,543 26	800 00	14,417 90
64	Porter	799 13	6,922 92	13,698 97	1,900 00	23,321 02
65	Posey	664 37	8,931 72	9,213 52	3,100 00	21,909 61
66	Pulaski	1,028 56	6,054 92	6,705 29	800 00	14,588 77
67	Putnam	932 44	7,606 16	12,609 47	900 00	22,048 07
68	Randolph	1,288 75	10,536 28	14,553 56	400 00	26,778 59
69	Ripley	365 27	8,008 88	3,072 84	2,200 00	13,646 99
70	Rush	154 16	6,684 84	11,837 17	1,000 00	19,676 17
71	Scott	257 21	3,608 40	2,096 38	100 00	6,061 99
72	Shelby	541 50	9,621 16	15,416 33	1,964 10	27,543 09
73	Spencer	1,069 99	9,340 92	5,232 06	2,500 00	18,142 97
74	Starke	18 85	4,279 24	4,899 65	1,850 00	11,047 74
75	St. Joseph	1,217 05	20,858 04	20,443 80	10,200 00	52,718 89
76	Steuben	503 24	5,276 20	6,877 41	.....	12,656 85
77	Sullivan	527 73	10,110 96	10,899 62	1,300 00	22,838 31
78	Switzerland	1,127 53	4,545 81	3,043 59	300 00	9,016 96
79	Tippecanoe	307 66	14,813 04	24,996 75	6,700 00	46,817 45
80	Tipton	633 46	7,592 52	7,340 80	1,100 00	16,666 78
81	Union	1,025 41	2,126 60	6,230 95	500 00	9,882 96
82	Vanderburgh	637 44	25,823 00	23,847 87	18,500 00	68,808 31
83	Vermillion	1,764 88	5,491 96	8,646 18	3,000 00	18,903 02
84	Vigo	1,689 90	23,692 68	35,301 44	6,500 00	67,184 02
85	Wabash	978 64	11,158 76	18,833 54	1,500 00	32,470 94
86	Warren	1,736 51	4,032 48	8,127 61	100 00	13,996 60
87	Warrick	627 89	9,373 16	4,660 36	1,900 00	16,561 41
88	Washington	748 57	7,769 60	6,184 84	600 00	15,303 01
89	Wayne	2,546 27	12,687 68	27,331 78	3,614 52	46,180 25
90	Wells	797 62	9,015 44	6,900 38	1,500 00	18,213 44
91	White	1,222 97	7,389 94	11,938 65	1,000 00	21,551 56
92	Whitley	328 54	6,787 76	8,579 30	1,300 00	16,995 60
	Total	$77,298 76	$944,235 41	$1,195,087 90	$261,495 38	$2,478,117 45

2. SCHOOL REVENUE, 1901.

TUITION REVENUE, JULY DISTRIBUTION, 1901.

Number.	COUNTIES.	Common School Revenue.	Congressional Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Dog Fund Revenue.	Total Distribution.
1	Adams	$11,349 87	$747 89	$6,046 76	$2,900 00		$21,044 52
2	Allen	36,194 34	583 53	22,854 96	16,300 00	$1,383 85	77,316 68
3	Bartholomew	8,826 22	2,166 91	12,824 26	1,166 67	1,300 55	26,284 61
4	Benton	5,846 19	1,153 25	13,939 41	900 00	811 73	22,650 58
5	Blackford	7,757 19	50 00	8,737 55	1,600 00	597 25	18,741 99
6	Boone	11,565 96	644 30	13,571 72	400 00	1,463 08	27,645 06
7	Brown	4,928 91	363 05	2,639 11			7,931 07
8	Carroll	8,925 84	750 00	14,754 84	800 00	651 50	25,882 18
9	Cass	15,176 28	870 80	16,624 84	2,700 00	512 00	35,883 92
10	Clark	14,463 61	555 63	15,771 26	2,100 00	1,401 55	34,292 05
11	Clay	16,588 95	325 94	7,021 90	3,400 00	1,400 84	28,737 63
12	Clinton	12,327 42	888 96	17,983 45	1,600 00	1,414 20	34,214 03
13	Crawford	7,657 23	340 00	1,593 14	100 00	642 50	10,332 87
14	Daviess	14,741 16	500 00	9,573 69	1,600 00		26,414 85
15	Dearborn	10,078 32	454 10	10,638 23	1,600 00	1,092 53	23,863 18
16	Decatur	8,315 79	743 45	14,780 13	300 00	1,098 60	25,237 97
17	Dekalb	10,767 75	600 00	10,133 95	1,468 90	701 09	23,671 69
18	Delaware	20,904 87	389 56	33,273 53	5,800 00	4,289 62	64,657 58
19	Dubois	11,169 06		3,979 01	1,600 00	1,727 35	18,475 42
20	Elkhart	18,532 29	1,388 06	27,122 10	19,832 29	1,553 84	68,428 58
21	Fayette	5,149 41	910 70	7,777 70	400 00	400 60	14,638 41
22	Floyd	12,802 23	760 20	3 064 47	5,415 00	1,059 50	23,101 40
23	Fountain	9,686 64	1,066 46	12,228 19	1,400 00	499 68	24,880 97
24	Franklin	7,307 37	1,111 64	6,445 63	1,050 00	1,514 37	17,429 01
25	Fulton	8,086 47	650 00	8,041 05	1,300 00	349 47	18,426 99
26	Gibson	14,123 76	1,034 30	12 745 71	1,645 00	1,940 18	31 488 95
27	Grant	24,585 75	1,305 80	26,063 83	6,025 00	1,484 04	59,464 42
28	Greene	14,207 55	472 41	10,376 27	1,500 00	707 99	27,264 22
29	Hamilton	13,250 58	884 91	12,120 18	1,000 00		27,255 67
30	Hancock	8,505 42	150 26	12,439 85	700 00	1,056 25	22,851 78
31	Harrison	10,463 46	824 18	7,231 64		1,331 61	19,850 89
32	Hendricks	9,049 32	653 32	13,812 70	100 00		23,615 34
33	Henry	10.210 62	217 55	15,407 59	538 34		26,374 10
34	Howard	12,420 03	667 07	15,131 40	1,000 00	1,546 86	30,765 36
35	Huntington	12,813 99	1,127 00	18,933 94	513 34		33,388 27
36	Jackson	12,248 04	686 87	8,957 07	1,600 00	1,874 07	25,366 05
37	Jasper	6,747 22	1,781 68	11,807 15	400 00	1,146 46	21,882 51
38	Jay	12,243 63	600 00	12 339 60	2,920 00		28.103 23
39	Jefferson	10,304 70	9 3 63	9,104 22	1,000 00	892 70	22,275 25
40	Jennings	6,933 99	485 61	7,179 45		650 10	15,249 15
41	Johnson	8,697 99	535 29	13,366 73	700 00	399 10	23,699 11
42	Knox	15,492 33	1,717 48	11,315 09	2,800 00		31,324 90
43	Kosciusko	12,887 49	1,546 27	15,657 36	1,700 00	1,346 25	33,137 37
44	Lagrange	6,762 00	181 00	7,369 04	300 00	695 76	15,307 80
45	Lake	17,689 98	1,189 11	27,545 54	10.100 00		56,524 63
46	Laporte	17,363 64	1,394 78	22,229 84	4,600 00	980 16	46,568 42
47	Lawrence	11,129 17	449 07	9,541 37	1,200 00	982 37	23,301 98
48	Madison	30,915 57	749 28	42,710 62	8,600 00	196 14	83,171 61

TUITION REVENUE, JULY DISTRIBUTION, 1901—Continued.

Number.	COUNTIES.	Common School Revenue.	Congressional Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Dog Fund Revenue.	Total Distribution.
49	Marion	$70,296 87	$222 66	$305,658 79	$27,145 14	$7,884 52	$411,207 98
50	Marshall	11,527 74	600 00	12,619 36	1,500 00	991 08	27,238 18
51	Martin	7,242 69	. . . .	.	1,100 00	237 25	8,579 94
52	Miami	12,750 78	1,033 16	16,199 91	2,600 00	1,135 79	33,719 64
53	Monroe	9,335 97	1,240 23	8,761 09	900 00	. . . . .	20,237 29
54	Montgomery	12,348 00	168 00	22,948 96	1,441 50	674 28	37,280 74
55	Morgan	9,046 38	. . . .	13,611 00	. . . . .	794 78	23,452 16
56	Newton	4,629 03	1,448 05	9,619 16	800 00	434 02	16,930 26
57	Noble	9,575 58	569 11	12,719 29	1,000 00	1,022 80	24,886 78
58	Ohio	2,071 23	371 00	2,365 12	100 00	127 50	5,034 85
59	Orange	7,961 52	221 19	4,706 96	400 00		13,289 67
60	Owen	7,063 35	623 45	6,302 29	500 00	176 77	14,665 86
61	Parke	9,901 92	971 38	13,548 86	2,100 00	829 63	27,351 79
62	Perry	10,043 04	1,752 96	1,624 14	1,700 00	1,515 45	16,635 59
63	Pike	10,322 34	495 68	5,762 75	300 00	1,036 22	17,916 99
64	Porter	8,415 75	585 60	19,267 98	1,500 00	983 29	30,752 62
65	Posey	10,678 08	1,458 18	15,189 12	1,900 00	1,994 60	31,219 98
66	Pulaski	7,136 85	756 23	7,633 45	1,100 00	607 62	17,234 15
67	Putnam	8,994 93	588 33	14,241 21	700 00	. . .	24,524 47
68	Randolph	12,331 83	700 00	16,028 81	800 00	1,342 64	31,203 28
69	Ripley	9,097 83	582 55	4,413 99	1,800 00	. .	15,894 37
70	Rush	7,654 29	596 64	12,025 72	50 00	1,030 75	21,807 40
71	Scott	4,114 53	256 61	2,107 31	300 00	. . . . .	6,778 45
72	Shelby	11,173 47	541 51	17,472 16	1,260 00	. . . . .	30,447 14
73	Spencer	10,739 82	453 89	6,474 16	1,600 00	2,039 95	21,307 82
74	Starke	5,244 96	603 00	5,327 16	600 00	795 00	12,570 12
75	St. Joseph	25,420 71	992 94	18,932 92	6,075 00	3,248 41	54,669 98
76	Steuben	5,990 25	503 24	7,543 23	. . . .	765 50	14,802 22
77	Sullivan	12,178 95	400 00	11,815 81	500 00	1,227 00	26,121 76
78	Switzerland	5,024 46	. .	3,638 43	600 00	592 00	9 854 89
79	Tippecanoe	17,798 76	1,402 96	29,973 76	4,025 00	1,138 75	54 339 23
80	Tipton	8,949 36	1,302 77	8,659 72	1,100 00	261 77	20,.73 62
81	Union	2,449 02	358 68	7,287 03	200 00	638 26	10,932 99
82	Vanderburgh	30,817 08	6,051 68	45,798 23	12,900 00	2,517 50	98,084 49
83	Vermillion	6,659 10	272 34	10,118 34	1,400 00	1,332 10	19,781 88
84	Vigo	28,641 48	1,739 67	44,949 19	9,965 00	1,468 66	86,764 00
85	Wabash	13,271 16	978 64	20,708 86	1,300 00	472 93	36,731 59
86	Warren	4,850 19	1,736 51	9,955 87	700 00	808 78	17,751 35
87	Warrick	10,688 37	610 00	5,974 18	600 00	. . .	17,872 55
88	Washington	9,269 82	758 72	8,395 05	200 00	1,244 94	19,868 53
89	Wayne	14,623 56	796 23	35,200 48	2,400 00	1,709 95	54,730 22
90	Wells	10,816 26	750 00	8,823 24	1,500 00	601 25	21,993 75
91	White	8,550 99	1,702 73	14,279 90	800 00	1,092 19	26,425 81
92	Whitley	7,983 57	708 69	11,010 22	1,000 00		20,702 48
	Total	$1,111,876 47	$75,846 51	$1,503,100 28	$223,586 18	$87,873 67	$3,002,283 11

2. SPECIAL SCHOOL REVENUE, 1901.

JANUARY AND JULY DISTRIBUTION.

Number.	COUNTIES.	December Settlement, 1900.	May Settlement, 1901.	Total.
1	Adams	$10,312 79	$10,861 15	$21,173 94
2	Allen	33,451 03	40,740 31	74,191 34
3	Bartholomew	10,944 10	15,675 22	26,619 32
4	Benton	11,676 85	14,220 97	25,897 82
5	Blackford	8,246 04	9,904 49	18,150 53
6	Boone	12,943 48	15,581 11	28,524 59
7	Brown	1,735 45	1,858 54	3,593 99
8	Carroll	11,369 78	13,695 61	25,065 39
9	Cass	20,194 16	23,647 84	43,842 00
10	Clark	8,304 53	13,228 75	21,533 28
11	Clay	10,410 29	11,350 60	21,760 89
12	Clinton	15,748 96	16,814 80	32,563 76
13	Crawford	3,143 20	3,668 72	6,811 92
14	Daviess	12,248 36	16,787 68	29,036 04
15	Dearborn	6,406 54	8,690 89	15,097 43
16	Decatur	8,742 09	7,598 22	16,340 31
17	Dekalb	9,535 13	13,763 96	23,299 09
18	Delaware	33,265 81	41,386 90	74,652 71
19	Dubois	5,140 74	8,539 61	13,680 35
20	Elkhart	23,536 40	28,887 02	52,423 42
21	Fayette	5,990 01	7,683 97	13,673 98
22	Floyd	7,143 39	18,721 18	25,864 57
23	Fountain	17,407 39	19,122 06	36,529 45
24	Franklin	4,281 97	5,806 58	10,088 55
25	Fulton	11,774 05	12,593 91	24,367 96
26	Gibson	11,628 86	12,144 84	23,773 70
27	Grant	28,480 86	35,334 99	63,815 85
28	Greene	8,906 90	10,919 23	19,826 13
29	Hamilton	14,070 76	17,137 22	31,207 98
30	Hancock	13,346 95	14,306 51	27,653 46
31	Harrison	6,633 07	6,983 05	13,616 12
32	Hendricks	13,548 43	13,893 75	27,442 18
33	Henry	18,749 27	19,951 16	38,700 43
34	Howard	15,592 22	18,258 87	33,851 09
35	Huntington	13,569 67	19,066 73	32,636 40
36	Jackson	9,487 76	11,443 08	20,930 84
37	Jasper	9,538 16	11,397 74	20,935 90
38	Jay	9,818 38	12,755 43	22,573 81
39	Jefferson	5,197 65	7,329 50	12,527 15
40	Jennings	4,562 73	5,848 37	10,411 10
41	Johnson	9,590 46	10,776 56	20,367 02
42	Knox	15,642 35	19,334 94	34,977 29
43	Kosciusko	12,581 70	14,241 88	26,823 58
44	Lagrange	9,953 81	11,489 71	21,443 52
45	Lake	19,887 34	40,231 99	60,119 33
46	Laporte	17,872 36	28,689 52	46,561 88
47	Lawrence	8,575 70	11,433 98	20,009 68
48	Madison	40,009 20	53,414 66	93,423 86

JANUARY AND JULY DISTRIBUTION—Continued.

Number.	COUNTIES.	December Settlement, 1900.	May Settlement, 1901.	Total.
49	Marion	$12,843 29	$17,426 82	$30,270 11
50	Marshall	12,903 34	16,290 77	29,194 11
51	Martin	3,249 78	3,949 20	7,198 98
52	Miami	18,707 28	20,040 97	38,748 25
53	Monroe	6,187 52	8,142 93	14,330 45
54	Montgomery	22,107 47	26,148 15	48,255 62
55	Morgan	8,727 73	12,673 78	21,401 51
56	Newton	7,916 41	7,949 11	15,865 52
57	Noble	9,013 94	12,474 51	21,488 45
58	Ohio	1,722 10	1,952 81	3,674 91
59	Orange	3,495 79	4,755 76	8,251 55
60	Owen	5,473 53	6,740 25	12,213 78
61	Parke	12,330 28	13,495 90	25,826 18
62	Perry	3,089 48	5,543 33	8,632 81
63	Pike	5,821 27	6,363 03	12,184 30
64	Porter	17,726 89	20,665 40	38,392 29
65	Posey	9,902 64	15,023 34	24,925 98
66	Pulaski	7,960 53	9,844 07	17,804 60
67	Putnam	10,932 87	11 140 65	22,073 52
68	Randolph	13,410 26	16,834 43	30,244 69
69	Ripley	4,786 41	7,052 05	11,838 46
70	Rush	9,612 41	10,619 13	20,231 54
71	Scott	2,544 62	2,102 44	4,647 06
72	Shelby	14,202 78	14,988 33	29,191 11
73	Spencer	7,453 90	9,205 02	16,658 92
74	Starke	6,356 53	7,635 54	13,992 07
75	St. Joseph	36,322 73	54,664 49	90,987 22
76	Steuben	5,798 01	7,712 65	13,510 66
77	Sullivan	12,187 05	10,860 96	23,048 01
78	Switzerland	3,654 32	4,134 69	7,789 01
79	Tippecanoe	26,786 45	35,866 01	62,651 46
80	Tipton	11,544 76	13,559 08	25,103 84
81	Union	4,298 85	5,100 00	9,398 85
82	Vanderburgh	42,934 21	54,266 35	97,200 56
83	Vermillion	6,761 65	7,739 17	14.500 82
84	Vigo	28,107 99	40,050 95	68,158 94
85	Wabash	14,318 25	16,553 03	30,871 28
86	Warren	6,909 28	7,097 97	14,007 25
87	Warrick	6,406 60	6,442 24	12,848 84
88	Washington	5,556 32	7,767 21	13,323 53
89	Wayne	21,505 11	27,851 00	49,356 11
90	Wells	17,681 23	17,013 69	34,694 92
91	White	11,516 98	12,650 53	24,167 51
92	Whitley	6,203 19	8,690 31	14,893 50
	Total	$1,128,168 16	$1,414,291 85	$2,542,460 01

3. ENUMERATION.

ENUMERATION, 1901.

Number.	COUNTIES.	White Males.	White Females.	Total.	Colored Males.	Colored Females.	Total.	Grand Total.
1	Adams	4,014	3,707	7,721	. . .	. . .	. . .	7,721
2	Allen	12,497	12,051	24,548	30	44	74	24,622
3	Bartholomew	3,622	3,347	6,969	59	67	126	7,095
4	Benton	2,033	1,920	3,953	7	17	24	3,977
5	Blackford	2,739	2,530	5,269	1	7	8	5,277
6	Boone	4,102	3,717	7,819	30	19	49	7,868
7	Brown	1,769	1,584	3,353	. . .	. . .	. . .	3,353
8	Carroll	3,138	2,930	6,068	1	3	4	6,072
9	Cass	5,349	4,925	10,274	19	31	50	10,324
10	Clark	4,535	4,290	8,825	518	506	1,024	9,849
11	Clay	5,760	5,395	11,155	70	60	130	11,285
12	Clinton	4,345	4,001	8,346	19	21	40	8,386
13	Crawford	2,796	2,413	5,209	. . .	. . .	. . .	5,209
14	Daviess	5,169	4,728	9,897	68	63	131	10,028
15	Dearborn	3,474	3,312	6,786	35	35	70	6,856
16	Decatur	2,895	2,731	5,626	16	15	31	5,657
17	Dekalb	3,912	3,409	7,321	1	3	4	7,325
18	Delaware	7,382	6,598	13,980	109	132	241	14,221
19	Dubois	3,909	3,675	7,584	7	7	14	7,598
20	Elkhart	6,387	6,210	12,597	6	4	10	12,607
21	Fayette	1,781	1,602	3,383	60	60	120	3,503
22	Floyd	4,085	3,995	8,080	321	308	629	8,709
23	Fountain	3,386	3,169	6,555	5	2	7	6,562
24	Franklin	2,528	2,442	4,970	. . .	1	1	4,971
25	Fulton	2,856	2,643	5,499	. . .	2	2	5,501
26	Gibson	4,750	4,365	9,115	274	219	493	9,608
27	Grant	8,542	7,794	16,336	207	182	389	16,725
28	Greene	5,022	4,601	9,623	24	18	42	9,665
29	Hamilton	4,713	4,158	8,871	72	71	143	9,014
30	Hancock	2,947	2,806	5,753	21	12	33	5,786
31	Harrison	3,637	3,377	7,014	54	50	104	7,118
32	Hendricks	3,144	2,924	6,068	54	34	88	6,156
33	Henry	3,553	3,251	6,804	62	80	142	6,946
34	Howard	4,328	3,955	8,283	85	81	166	8,449
35	Huntington	4,527	4,185	8,712	3	2	5	8,717
36	Jackson	4,251	4,013	8,264	42	26	68	8,332
37	Jasper	2,455	2,271	4,726	. . .	. . .	. . .	4,726
38	Jay	4,420	3,849	8,269	27	33	60	8,329
39	Jefferson	3,457	3,271	6,728	149	133	282	7,010
40	Jennings	2,395	2,222	4,617	46	54	100	4,717
41	Johnson	3,028	2,752	5,780	65	72	137	5,917
42	Knox	5,358	4,992	10,350	89	100	189	10,539
43	Kosciusko	4,456	4,308	8,764	3	. . .	3	8,767
44	Lagrange	2,395	2,205	4,600	. . .	. . .	. . .	4,600
45	Lake	6,090	5,938	12,028	. . .	6	6	12,034
46	Laporte	6,064	5,723	11,787	13	12	25	11,812
47	Lawrence	3,920	3,567	7,487	51	33	84	7,571
48	Madison	10,911	9,866	20,777	143	111	254	21,031

ENUMERATION, 1901—Continued.

Number.	COUNTIES.	White Males.	White Females.	Total.	Colored Males.	Colored Females.	Total.	Grand Total.
49	Marion	22,196	21,630	43,826	1,943	2,052	3,995	47,821
50	Marshall	4,043	3,796	7,839	....	3	3	7,842
51	Martin	2,575	2,351	4,926	....	1	1	4,927
52	Miami	4,508	4,152	8,660	7	7	14	8,674
53	Monroe	3,206	3,045	6,251	51	49	100	6,351
54	Montgomery	4,356	3,965	8,321	39	40	79	8,400
55	Morgan	3,219	2,902	6,121	17	16	33	6,154
56	Newton	1,601	1,540	3,141	4	4	8	3,149
57	Noble	3,342	3,169	6,511	1	2	3	6,514
58	Ohio	705	663	1,368	19	22	41	1,409
59	Orange	2,889	2,570	5,459	8	17	25	5,484
60	Owen	2,522	2,245	4,767	23	15	38	4,805
61	Parke	3,511	3,141	6,652	39	45	84	6,736
62	Perry	3,457	3,286	6,743	48	41	89	6,832
63	Pike	3,605	3,368	6,973	26	23	49	7,022
64	Porter	2,994	2 731	5,725	....	....	....	5,725
65	Posey	3,584	3,224	6,808	223	233	456	7,264
66	Pulaski	2,542	2,313	4,855	....	....	....	4,855
67	Putnam	3,097	2,939	6,036	42	41	83	6,119
68	Randolph	4,341	3,895	8,236	80	73	153	8,389
69	Ripley	3,210	2,965	6,175	9	5	14	6,189
70	Rush	2,684	2,350	5,034	91	82	173	5,207
71	Scott	1,525	1,274	2,799	....	....	....	2,799
72	Shelby	3,921	3,546	7,467	76	58	134	7,601
73	Spencer	3,549	3,302	6,851	238	217	455	7,306
74	Starke	1,872	1,696	3,568	....	....	....	3,568
75	St. Joseph	8,938	8,198	17,136	84	73	157	17,293
76	Steuben	2,114	1,959	4,073	2	....	2	4,075
77	Sullivan	4,252	3,981	8,233	27	25	52	8,285
78	Switzerland	1,724	1,658	3,382	17	19	36	3,418
79	Tippecanoe	6,270	5,695	11,965	76	67	143	12,108
80	Tipton	3,174	2,914	6,088	....	....	....	6,088
81	Union	826	797	1,623	24	19	43	1,666
82	Vanderburgh	9,479	9,690	19,169	891	904	1,795	20,964
83	Vermillion	2,359	2,139	4,498	13	19	32	4,530
84	Vigo	9,352	9,451	18,803	326	355	681	19,484
85	Wabash	4,644	4,359	9,003	13	12	25	9 028
86	Warren	1,782	1,541	3,323	3	1	4	3,337
87	Warrick	3,603	3,419	7,022	137	112	249	7,271
88	Washington	3,277	3,029	6,306	....	....	....	6,306
89	Wayne	4,994	4,580	9,574	182	192	374	9,948
90	Wells	3,783	3,575	7,358	....	....	....	7,358
91	White	3,049	2,763	5,812	1	4	5	5,817
92	Whitley	2,765	2,666	5,431	....	....	....	5,431
	Total	384,265	358,189	742,454	7,646	7,584	15,230	757,684

3. ENROLLMENT AND ATTENDANCE.

ENROLLMENT AND ATTENDANCE, 1901.

Number.	COUNTIES.	White Males.	Colored Males.	White Females.	Colored Females.	Total.	Daily Attendance.
1	Adams	2,852	. . .	2,603	. . .	5,455	4,103
2	Allen	6,131	24	5,781	19	11,955	8,753
3	Bartholomew	2,681	44	2,569	45	5,339	3,850
4	Benton	1,643	9	1,498	7	3,157	2,430
5	Blackford	2,134	1	2,123	5	4,263	3,021
6	Boone	3,391	13	3,104	10	6,518	5,065
7	Brown	1,427	.	1,332	. . .	2,759	1,860
8	Carroll	2,639	1	2,527	1	5,168	4,118
9	Cass	3,554	7	3,458	11	7,030	5,510
10	Clark	3,018	327	2,979	355	6,679	5,267
11	Clay	4,219	38	4,132	29	8,418	6,196
12	Clinton	3,527	10	3,443	16	6,996	5,236
13	Crawford	2,100	. . . .	1,756	. .	3,856	2,581
14	Daviess	3,739	50	3,531	50	7,370	5,236
15	Dearborn	2,096	10	2,098	19	4,223	3,321
16	Decatur	2,185	11	2,093	13	4,302	3 137
17	Dekalb	2,987	1	2,715	3	5,706	4,390
18	Delaware	5,448	74	5,463	87	11,072	7,706
19	Dubois	2,434	3	2,369	2	4,808	3.623
20	Elkhart	4,821	3	4,870	4	9,698	8,361
21	Fayette	1,248	43	1,145	52	2,488	1,860
22	Floyd	2,529	212	2,531	231	5,503	4,253
23	Fountain	2,744	2	2,528	2	5,276	4,052
24	Franklin	1,837	. .	1,778	. . . .	3,615	2,811
25	Fulton	2,327	.	2,202	. . .	4,529	3,459
26	Gibson	3,697	217	3,387	211	7,512	5,468
27	Grant	6,002	188	5,926	182	12,298	9,748
28	Greene	3,888	14	3,749	10	7,661	5,810
29	Hamilton	3,838	38	3,523	33	7,432	5,886
30	Hancock	2,496	8	2,282	4	4,790	3,696
31	Harrison	2,808	69	2,516	68	5,461	3,635
32	Hendricks	2,324	27	2,274	30	4,655	3,661
33	Henry	2,680	44	2,498	63	5,285	4,207
34	Howard	3,516	62	3,342	67	6.987	5,108
35	Huntington	3,369	2	3,269	5	6,645	5,204
36	Jackson	3,099	27	2,983	19	6,128	4,547
37	Jasper	2,045	. . . .	2,018	.	4,063	2,736
38	Jay	3,538	15	3,196	16	6,765	5,090
39	Jefferson	2,298	102	2,270	104	4,774	3,760
40	Jennings	1,919	33	1,833	29	3,814	2,979
41	Johnson	2,316	45	2,234	52	4,647	3,592
42	Knox	3,394	57	3,414	67	6,932	5,842
43	Kosciusko	3,665	2	3,473	. . . . .	7,140	5,580
44	Lagrange	1,990	. . . . .	1,872	. . . . .	3,862	2,974
45	Lake	3,865	. . . .	3,964	6	7,835	5,544
46	Laporte	3,315	4	3.242	6	6,567	5,034
47	Lawrence	3.144	25	2,942	20	6,131	4 321
48	Madison	7,701	85	7,625	101	15,512	11,719

ENROLLMENT AND ATTENDANCE, 1901—Continued.

Number.	COUNTIES.	White Males.	Colored Males.	White Females.	Colored Females.	Total.	Daily Attendance.
49	Marion	15,325	1,311	15 036	1,371	33,043	25,440
50	Marshall	3,321	2	3,136	6	6,465	5,081
51	Martin	2,028	. . . . .	1,896	. . . . .	3,924	2,582
52	Miami	3,447	4	3,175	3	6,629	5,156
53	Monroe	2,634	44	2,632	42	5,352	4,067
54	Montgomery	3,478	31	3,370	34	6,913	5,172
55	Morgan	2,551	14	2,345	11	4,921	3,807
56	Newton	1,369	2	1,356	3	2,730	2,037
57	Noble	2,528	1	2,457	2	4,988	3,894
58	Ohio	558	10	551	19	1,138	800
59	Orange	2,115	1	2,015	2	4,133	3,357
60	Owen	2,006	17	1,752	16	3,791	3,161
61	Parke	2,736	30	2,686	42	5,494	3,924
62	Perry	2,142	31	1,946	32	4,151	2,766
63	Pike	2,719	3	2,572	. . . . .	5,294	3,610
64	Porter	2,213	. . . . .	2,049	. . . .	4,262	3,130
65	Posey	2,440	127	2,298	181	5,046	3,809
66	Pulaski	1,957	. . .	1,853	. . .	3,810	2,951
67	Putnam	2,462	28	2,396	25	4,911	3,688
68	Randolph	3,436	60	3,378	49	6,923	5,201
69	Ripley	2,144	4	2,090	. . . . .	4,238	3,227
70	Rush	2,046	69	1,840	64	4,019	3,136
71	Scott	1,252	. . . . .	1,092	. . . .	2,344	1,644
72	Shelby	2,953	55	2,913	50	5,971	4,412
73	Spencer	2,628	155	2,561	170	5,514	3,755
74	Starke	1,375	. . .	1,395	. . .	2,770	2,304
75	St. Joseph	4,530	38	4,501	47	9,116	6,661
76	Steuben	1,806	2	1,733	. . . . .	3,541	2,835
77	Sullivan	3,405	11	3,340	16	6,772	4,905
78	Switzerland	1,290	8	1,270	12	2,580	2,138
79	Tippecanoe	4,081	45	4,061	53	8,240	6,053
80	Tipton	2,501	. . . . .	2,350	. . . . .	4,851	3,591
81	Union	681	18	679	17	1,395	1,042
82	Vanderburgh	5,019	536	5,172	622	11,349	8,772
83	Vermillion	1,998	5	1,925	7	3,935	2,697
84	Vigo	6,175	247	6,239	251	12,912	9,406
85	Wabash	3,521	21	3,482	9	7,033	5,640
86	Warren	1,407	. . . .	1,390	. . . .	2,797	2,088
87	Warrick	2,889	99	2,622	97	5,707	4,309
88	Washington	2,679	. . . . .	2,678	. . . . .	5,357	3,852
89	Wayne	2,400	108	3,295	107	5,910	5,488
90	Wells	3,007	. . .	2,809	. . . .	5,816	4,307
91	White	2,624	1	2,471	2	5,098	4,575
92	Whitley	2,166	10	2,142	3	4,321	3,456
	Total	278,218	5,105	267,960	5,448	556,731	420,276

4. NUMBER SCHOOL HOUSES.

NUMBER SCHOOL HOUSES, 1901.

Number.	COUNTIES.	Stone.	Brick.	Frame.	Log.	Total.
1	Adams		76	19		95
2	Allen		170	21		191
3	Bartholomew		82	26		108
4	Benton		10	86		96
5	Blackford		48	4		52
6	Boone		114	22		136
7	Brown			76		76
8	Carroll		86	23		109
9	Cass	1	66	53		120
10	Clark		16	89	2	107
11	Clay		53	62		115
12	Clinton	1	107	12		120
13	Crawford		2	81		83
14	Daviess		43	89		132
15	Dearborn	4	52	44		100
16	Decatur		84	8		92
17	Dekalb		101	13		114
18	Delaware		130	12		142
19	Dubois		6	99	1	106
20	Elkhart		134	18		152
21	Fayette		4	45		49
22	Floyd		13	42		55
23	Fountain		13	82		95
24	Franklin	16	40	38		94
25	Fulton		36	65		101
26	Gibson		11	108		119
27	Grant		115	23		138
28	Greene		22	130		152
29	Hamilton		65	41		106
30	Hancock	1	72	16		89
31	Harrison			151		151
32	Hendricks		81	14		95
33	Henry		38	53		91
34	Howard		81	12		93
35	Huntington		109	4		113
36	Jackson		17	99		116
37	Jasper		5	111		116
38	Jay		99	21		120
39	Jefferson	34	19	61		114
40	Jennings		41	50	1	92
41	Johnson		85	7		92
42	Knox		37	87		124
43	Kosciusko		135	21		156
44	Lagrange		55	48		103
45	Lake	1	33	90		124
46	Laporte	1	49	94		144
47	Lawrence	1	5	104		110
48	Madison		136	10		146

NUMBER SCHOOL HOUSES, 1901—Continued.

Number.	COUNTIES.	Stone.	Brick.	Frame.	Log.	Total.
49	Marion		117	40		157
50	Marshall		44	89		133
51	Martin		2	96		98
52	Miami		102	24		126
53	Monroe		15	90		105
54	Montgomery	1	53	91		145
55	Morgan		78	28		106
56	Newton		4	74		78
57	Noble		110	7		117
58	Ohio		1	26		27
59	Orange		2	98		100
60	Owen		3	94		97
61	Parke		11	115		126
62	Perry	1	4	99		104
63	Pike		5	101		106
64	Porter		54	49		103
65	Posey		27	65		92
66	Pulaski		6	95		101
67	Putnam		30	102		132
68	Randolph		68	69		137
69	Ripley	14	63	33		110
70	Rush		56	32		88
71	Scott		21	31		52
72	Shelby		123	10		133
73	Spencer		40	81		121
74	Starke		11	57		68
75	St. Joseph		72	56		128
76	Steuben	1	82	14		97
77	Sullivan		80	46		126
78	Switzerland	15	18	45		78
79	Tippecanoe		73	74		147
80	Tipton		78	6		84
81	Union		26	12		38
82	Vanderburgh		62	32		94
83	Vermillion		30	45		75
84	Vigo		37	92		129
85	Wabash	1	121	12		134
86	Warren		7	91		98
87	Warrick		8	111		119
88	Washington		2	135		137
89	Wayne		76	16		92
90	Wells		105			105
91	White		7	112		119
92	Whitley		90	7		97
	Total	93	4,820	5,086	4	10,003

5. TEACHERS EMPLOYED.

NUMBER TEACHERS EMPLOYED, 1901.

Number.	COUNTIES.	Males.	Females.	Total.
1	Adams	76	56	132
2	Allen	106	247	353
3	Bartholomew	84	80	164
4	Benton	45	80	125
5	Blackford	53	42	95
6	Boone	94	86	180
7	Brown	62	13	75
8	Carroll	100	63	163
9	Cass	72	126	198
10	Clark	80	104	184
11	Clay	101	85	186
12	Clinton	106	87	193
13	Crawford	73	16	89
14	Daviess	115	70	185
15	Dearborn	61	82	143
16	Decatur	59	81	140
17	Dekalb	84	77	161
18	Delaware	129	146	275
19	Dubois	77	72	149
20	Elkhart	111	167	278
21	Fayette	32	50	82
22	Floyd	44	80	124
23	Fountain	75	92	167
24	Franklin	51	57	108
25	Fulton	76	56	132
26	Gibson	116	88	204
27	Grant	128	143	271
28	Greene	103	95	198
29	Hamilton	107	95	202
30	Hancock	93	52	145
31	Harrison	118	52	170
32	Hendricks	67	86	153
33	Henry	89	80	169
34	Howard	93	77	170
35	Huntington	103	89	192
36	Jackson	82	91	173
37	Jasper	45	94	139
38	Jay	106	67	173
39	Jefferson	41	118	159
40	Jennings	53	65	118
41	Johnson	70	74	144
42	Knox	93	103	196
43	Kosciusko	101	107	208
44	Lagrange	61	75	136
45	Lake	51	190	241
46	Laporte	47	163	210
47	Lawrence	71	86	157
48	Madison	141	224	365

NUMBER TEACHERS EMPLOYED, 1901—Continued.

Number.	COUNTIES.	Males.	Females.	Total.
49	Marion	139	695	834
50	Marshall	98	88	186
51	Martin	65	46	111
52	Miami	110	90	200
53	Monroe	67	78	145
54	Montgomery	105	122	227
55	Morgan	75	80	155
56	Newton	40	65	105
57	Noble	70	88	158
58	Ohio	24	13	37
59	Orange	69	43	112
60	Owen	65	50	115
61	Parke	80	90	170
62	Perry	80	51	131
63	Pike	103	26	129
64	Porter	43	106	149
65	Posey	77	71	148
66	Pulaski	53	73	126
67	Putnam	67	104	171
68	Randolph	102	95	197
69	Ripley	69	64	133
70	Rush	64	72	136
71	Scott	38	28	66
72	Shelby	118	81	199
73	Spencer	78	98	176
74	Starke	38	47	85
75	St. Joseph	80	203	283
76	Steuben	38	90	128
77	Sullivan	93	74	167
78	Switzerland	42	52	94
79	Tippecanoe	85	174	259
80	Tipton	85	35	120
81	Union	20	39	59
82	Vanderburgh	61	262	323
83	Vermillion	57	61	118
84	Vigo	84	247	331
85	Wabash	87	145	232
86	Warren	49	66	115
87	Warrick	105	53	158
88	Washington	117	44	161
89	Wayne	69	149	218
90	Wells	92	55	147
91	White	76	86	162
92	Whitley	57	70	127
	Total	7,179	8,800	15,979

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN TOWNSHIPS, 1900–1901.

Number.	COUNTIES.	Number of Teachers in Townships.			Aggregate Amount Paid Teachers Per Day.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Av. for all Teachers in Townships.
1	Adams	65	33	98	$128 25	$61 65	$189 90	$1 97	$1 87	$1 95
2	Allen	92	92	184	191 01	167 85	358 86	2 07	1 82	1 95
3	Bartholomew	66	43	109	139 99	87 19	227 18	2 25	1 92	2 08
4	Benton	34	58	92	86 30	118 43	204 73	2 54	2 05	2 23
5	Blackford	40	7	47	91 00	13 95	104 95	2 17	1 94	2 23
6	Boone	84	53	137	191 85	115 03	306 88	2 28	2 17	2 24
7	Brown	60	12	72	98 47	18 20	116 67	1 64	1 52	1 62
8	Carroll	92	49	141	216 07	108 50	324 57	2 39	2 21	2 30
9	Cass	59	64	123	128 95	131 25	260 20	2 18	2 05	2 11
10	Clark	63	50	113	137 80	102 50	240 30	2 20	1 98	2 13
11	Clay	80	51	131	167 80	99 51	267 31	2 10	1 95	2 04
12	Clinton	91	42	133	217 07	88 17	305 24	2 38	2 10	2 29
13	Crawford	65	13	78	114 90	22 70	137 60	1 77	1 75	1 76
14	Daviess	92	42	134	189 50	82 40	271 90	2 06	1 96	2 03
15	Dearborn	50	42	92	104 96	87 29	192 25	2 10	2 08	2 09
16	Decatur	50	57	107	122 22	118 20	240 42	2 44	2 07	2 31
17	Dekalb	65	39	104	120 71	65 58	186 29	1 86	1 68	1 79
18	Delaware	106	53	159	253 51	118 85	372 36	2 39	2 24	2 34
19	Dubois	66	55	121	120 89	97 59	218 48	1 83	1 77	1 81
20	Elkhart	89	57	146	167 71	102 32	270 03	1 88	1 80	1 85

21	Fayette	23	29	52	59 14	58 45	117 59	2 46	2 02	2 26
22	Floyd	28	17	46	56 50	36 10	92 60	2 02	2 00	2 01
23	Fountain	65	59	124	131 05	95 87	226 92	2 02	1 62	1 83
24	Franklin	45	46	91	101 44	97 63	199 07	2 25	2 12	2 19
25	Fulton	71	41	112	147 78	77 51	225 29	2 08	1 89	2 01
26	Gibson	104	56	160	260 33	120 41	380 74	2 50	2 15	2 38
27	Grant	95	32	127	129 56	73 75	203 31	2 42	2 30	2 39
28	Greene	94	68	162	184 20	122 93	307 13	1 96	1 81	1 90
29	Hamilton	90	61	151	225 79	123 73	349 52	2 51	2 03	2 31
30	Hancock	80	29	109	183 67	61 04	244 71	2 30	2 18	2 25
31	Harrison	105	42	147	177 10	70 52	247 62	1 69	1 68	1 68
32	Hendricks	64	74	138	166 40	172 79	339 19	2 60	2 34	2 46
33	Henry	72	49	121	166 97	103 88	270 85	2 41	2 16	2 34
34	Howard	74	32	106	167 63	67 08	234 71	2 25	2 10	2 21
35	Huntington	84	32	116	182 45	61 24	243 69	2 17	1 91	2 10
36	Jackson	74	53	127	147 00	93 98	240 98	1 99	1 77	1 89
37	Jasper	36	75	111	79 15	141 35	220 50	2 19	1 88	1 99
38	Jay	86	34	120	177 42	65 03	242 45	2 09	1 97	2 02
39	Jefferson	36	77	113	66 60	120 90	187 50	1 85	1 57	1 65
40	Jennings	49	51	100	93 95	89 90	183 85	1 92	1 80	1 84
41	Johnson	60	42	102	138 05	86 35	224 40	2 30	2 06	2 20
42	Knox	83	74	157	189 53	149 99	339 52	2 28	2 03	2 16
43	Kosciusko	79	74	153	148 00	133 71	281 71	1 87	1 80	1 84
44	Lagrange	54	64	118	101 44	96 84	198 28	1 88	1 51	1 68
45	Lake	39	91	130	95 04	176 45	271 49	2 44	1 94	2 09
46	Laporte	55	90	125	83 15	173 63	256 78	2 38	1 93	2 05
47	Lawrence	61	57	118	129 11	110 29	239 40	2 13	1 89	2 02
48	Madison	95	57	152	267 99	135 29	403 28	2 82	2 37	2 65
49	Marion	61	96	157	163 50	223 11	386 61	2 68	2 32	2 46
50	Marshall	80	61	141	160 85	134 54	295 39	2 01	2 21	2 09
51	Martin	62	36	98	96 27	58 48	154 75	1 64	1 59	1 58
52	Miami	97	50	147	212 14	99 91	312 05	2 19	2 00	2 12
53	Monroe	60	46	106	109 46	72 96	182 42	1 82	1 59	1 72
54	Montgomery	90	77	167	213 57	173 35	386 92	2 37	2 25	2 32
55	Morgan	66	58	124	149 08	117 85	266 93	2 26	2 03	2 15
56	Newton	31	46	77	72 76	89 61	162 37	2 18	2 08	2 11

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN TOWNSHIPS, 1900–1901—Continued.

Number.	COUNTIES.	Number of Teachers in Townships.			Aggregate Amount Paid Teachers Per Day.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Av. for all Teachers in Townships.
57	Noble	60	59	119	$109 85	$96 65	$206 50	$1 83	$1 64	$1 73
58	Ohio	19	6	25	31 58	10 60	42 18	1 66	1 80	1 69
59	Orange	62	36	98	115 41	65 21	180 62	1 86	1 81	1 84
60	Owen	60	47	107	116 47	87 44	203 91	1 94	1 86	1 91
61	Parke	77	70	147	177 06	146 17	323 23	2 30	2 09	2 20
62	Perry	71	34	105	117 75	54 60	172 35	1 66	1 60	1 64
63	Pike	97	18	115	195 58	34 45	230 03	2 02	1 91	2 00
64	Porter	37	76	113	80 84	142 45	223 29	2 18	1 87	1 98
65	Posey	63	46	109	167 65	97 75	265 40	2 66	2 13	2 43
66	Pulaski	47	63	110	96 73	109 20	205 93	2 06	1 73	1 87
67	Putnam	62	76	138	125 97	146 50	272 47	2 03	1 92	1 97
68	Randolph	88	53	141	195 82	106 54	302 36	2 23	2 01	2 14
69	Ripley	58	54	112	112 93	96 94	209 87	1 94	1 78	1 87
70	Rush	59	47	106	140 60	98 38	238 98	2 50	2 12	2 25
71	Scott	35	23	58	57 86	35 24	93 10	1 65	1 53	1 62
72	Shelby	108	49	157	234 54	100 02	334 56	2 17	2 04	2 13
73	Spencer	65	71	136	119 41	120 69	240 10	1 84	1 70	1 77
74	Starke	32	37	69	64 01	72 72	136 73	2 00	1 97	1 98
75	St. Joseph	61	60	121	132 29	119 77	252 06	2 17	2 00	2 08
76	Steuben	28	75	103	42 15	95 06	137 21	1 59	1 26	1 33
77	Sullivan	83	53	136	180 43	106 18	286 61	2 17	2 00	2 11
78	Switzerland	38	38	76	67 15	63 85	131 00	1 76	1 68	1 72
79	Tippecanoe	70	93	163	176 21	192 12	368 33	2 52	2 07	2 26
80	Tipton	77	19	96	176 93	40 79	217 72	2 29	2 14	2 27
81	Union	14	30	44	34 74	64 73	99 47	2 48	2 16	2 26
82	Vanderburgh	33	51	84	81 70	115 59	197 29	2 47	2 09	2 35
83	Vermillion	45	40	85	111 38	83 16	194 54	2 48	2 08	2 29
84	Vigo	54	85	139	131 18	189 25	320 43	2 48	2 15	2 31

85	Wabash	80	77	157	173 96	159 39	333 35	2 17	2 07	2 12
86	Warren	44	55	99	93 48	115 10	208 58	2 12	2 09	2 11
87	Warrick	93	40	133	176 37	73 57	249 94	1 90	1 84	1 88
88	Washington	104	29	133	183 62	48 13	231 75	1 77	1 66	1 74
89	Wayne	47	52	99	114 88	118 13	233 01	2 44	2 27	2 35
90	Wells	83	39	122	175 88	72 73	248 61	2 11	1 86	2 02
91	White	64	53	117	155 68	108 93	264 61	2 43	2 06	2 26
92	Whitley	52	46	98	106 77	95 88	202 65	2 01	1 69	2 07
	Total	6,156	4,805	10,961	$12,797 90	$9,177 52	$21,975 42	$2 14	$1 94	$2 05

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN TOWNS, 1900–1901.

Number.	COUNTIES.	Number of Teachers in Towns.			Aggregate Amount Paid Teachers in Towns.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average for all Teachers in Towns.
1	Adams	3	7	10	$16 00	$13 15	$29 15	$5 33	$1 88	$2 92
2	Allen	4	7	11	1[illegible] 80	13 94	24 74	2 70	2 28	2 43
3	Bartholomew	6	7	13	15 50	12 71	28 21	2 58	1 81	2 17
4	Benton	11	22	33	33 50	52 79	86 29	3 05	2 40	2 61
5	Blackford. (None reported)									
6	Boone	6	11	17	22 37	23 88	46 25	3 72	2 17	2 72
7	Brown	2	1	3	4 05	1 95	6 00	2 02	1 95	2 00
8	Carroll	4	5	9	11 00	11 50	22 50	2 75	2 28	2 50
9	Cass	4	5	9	10 60	10 00	20 60	2 65	2 00	2 29
10	Clark	9	15	24	23 23	34 46	57 69	2 98	2 16	2 41
11	Clay	15	13	28	38 15	25 90	64 05	2 54	1 99	2 29
12	Clinton	8	12	20	24 [illegible]5	25 05	49 40	3 04	2 09	2 47
13	Crawford	8	3	11	25 20	7 45	32 65	3 15	2 48	2 97
14	Daviess	9	6	15	21 75	10 75	32 50	2 42	1 80	2 17
15	Dearborn	4	9	13	13 75	22 75	36 50	3 44	2 53	2 81
16	Decatur	5	4	9	11 50	8 00	19 50	2 30	2 00	2 17
17	Dekalb	8	20	28	27 63	38 02	65 65	3 45	1 90	2 34
18	Delaware	9	11	20	23 88	22 [illegible]0	46 58	2 65	2 06	2 33
19	Dubois	5	8	13	13 00	15 00	28 00	2 60	1 87	2 15
20	Elkhart	9	12	21	30 19	21 25	51 44	3 35	1 77	2 45

21	Fayette	1	2	3	2 25	4 50	6 75	2 25	2 25	2 25
22	Floyd	2	2	4	4 25	3 90	8 15	2 13	1 95	2 04
23	Fountain. (None reported)									
24	Franklin	6	11	17	21 03	23 14	44 17	3 50	2 10	2 60
25	Fulton	7	17	24	29 22	37 00	66 22	4 17	2 18	2 76
26	Gibson	3	8	11	13 62	14 82	28 44	4 54	1 85	2 59
27	Grant	14	29	43	42 27	59 62	101 89	3 02	2 06	2 37
28	Greene	7	15	22	16 25	29 50	45 75	2 32	1 97	2 08
29	Hamilton	9	14	23	24 76	27 52	52 28	2 75	1 97	2 27
30	Hancock	7	5	12	19 00	10 75	29 75	2 71	2 15	2 48
31	Harrison	13	10	23	30 00	18 12	48 12	2 31	1 81	2 09
32	Hendricks	3	12	15	11 50	26 62	38 12	3 83	2 22	2 54
33	Henry	17	31	48	61 82	70 93	132 75	3 64	2 29	2 77
34	Howard	5	3	8	12 25	6 00	18 25	2 45	2 00	2 28
35	Huntington	11	16	27	32 11	34 93	67 04	2 92	2 18	2 48
36	Jackson	4	14	18	11 29	28 21	39 50	2 82	2 02	2 20
37	Jasper	5	7	12	15 50	14 00	29 50	3 10	2 00	2 46
38	Jay	4	7	11	11 50	13 75	25 25	2 87	1 96	2 30
39	Jefferson	1	7	8	1 70	13 44	15 14	1 70	1 92	1 89
40	Jennings	1	4	5	3 50	6 25	9 75	3 50	1 56	1 95
41	Johnson	4	14	18	20 75	28 87	49 62	5 18	2 06	2 76
42	Knox. (None reported)									
43	Kosciusko	17	19	36	42 90	35 75	78 65	2 51	1 88	2 18
44	Lagrange	7	11	18	18 52	22 38	40 90	2 65	2 03	2 22
45	Lake	6	32	38	26 72	81 76	108 48	4 45	2 56	2 85
46	Laporte	2	2	4	5 25	4 00	9 25	2 63	2 00	2 31
47	Lawrence	5	4	9	13 50	8 00	21 60	2 70	2 00	2 39
48	Madison	17	24	41	48 73	57 32	106 05	2 87	2 39	2 59
49	Marion	2	9	11	9 75	22 75	32 50	4 88	2 53	2 95
50	Marshall	12	15	27	34 05	28 18	62 23	2 84	1 88	2 30
51	Martin	3	10	13	12 20	15 35	27 55	4 07	1 54	2 12
52	Miami	7	11	18	19 75	23 00	42 75	2 82	2 09	2 38
53	Monroe	2	2	4	4 00	4 40	8 40	2 00	2 20	2 10
54	Montgomery	9	17	26	26 25	38 68	64 93	2 92	2 27	2 50
55	Morgan	2	6	8	6 50	13 25	19 75	3 75	2 21	2 47
56	Newton	9	19	28	22 13	46 05	68 18	2 46	2 42	2 44

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN TOWNS, 1900–1901—Continued.

Number.	COUNTIES.	Number of Teachers in Towns.			Aggregate Amount Paid Teachers in Towns.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average for all Teachers in Towns.
57	Noble	5	7	12	$14 25	$11 25	$25 50	$2 85	$1 61	$2 13
58	Ohio. (None reported.)									
59	Orange	7	7	14	19 40	13 25	32 65	2 77	1 89	2 33
60	Owen	5	3	8	18 75	6 00	24 75	3 75	2 00	3 09
61	Parke	3	20	23	13 67	45 75	59 42	4 56	2 29	2 58
62	Perry	2	2	4	5 12	3 25	8 37	2 56	1 63	2 09
63	Pike	6	8	14	17 00	16 00	33 00	2 83	2 00	2 36
64	Porter	2	3	5	6 52	6 00	12 52	3 26	2 00	2 50
65	Posey	5	8	13	16 00	19 25	35 25	3 20	2 41	2 71
66	Pulaski	6	10	16	20 26	18 88	39 14	3 38	1 89	2 45
67	Putnam	6	9	15	16 75	18 00	34 75	2 79	2 00	2 32
68	Randolph	8	13	21	22 62	26 46	49 08	2 83	2 04	2 34
69	Ripley	11	10	21	27 65	20 70	48 35	2 51	2 07	2 30
70	Rush	2	6	8	7 75	15 38	23 13	3 88	2 56	2 89
71	Scott	3	5	8	7 50	9 25	16 75	2 50	1 85	2 09
72	Shelby	2	2	4	5 60	4 25	9 85	2 80	2 13	2 46
73	Spencer	13	27	40	36 90	53 78	90 68	2 84	1 99	2 27
74	Starke	6	10	16	21 22	23 13	44 35	3 54	2 31	2 77
75	St. Joseph	9	8	17	21 86	14 25	36 11	2 43	1 78	2 12
76	Steuben	10	15	25	29 37	24 56	53 93	2 94	1 65	2 16
77	Sullivan	10	21	31	30 89	48 51	79 40	3 09	2 31	2 56
78	Switzerland	3	3	6	7 25	5 00	12 25	2 42	1 67	2 04
79	Tippecanoe	3	12	15	10 50	33 00	43 50	3 50	2 75	2 90
80	Tipton	2	5	7	5 50	9 91	15 41	2 25	1 98	2 20
81	Union	2	4	6	6 61	8 00	14 61	3 31	2 00	2 44
82	Vanderburgh. (None reported.)									
83	Vermillion	8	11	19	24 57	25 53	50 10	3 07	2 32	2 21
84	Vigo	2	1	3	4 50	2 50	7 00	2 25	2 50	2 33

85	Wabash	6	17	23	20 30	34 55	54 85	3 38	2 03	2 38
86	Warren	5	11	16	18 00	25 50	43 50	3 60	2 14	2 72
87	Warrick	12	13	25	29 34	27 84	57 18	2 45	2 14	2 29
88	Washington	13	15	28	34 77	27 37	62 14	2 67	1 82	2 22
89	Wayne	12	22	34	41 62	46 47	88 09	3 64	2 11	2 59
90	Wells. (None reported.)									
91	White	12	33	45	41 42	87 03	128 45	3 45	2 64	2 85
92	Whitely	3	10	13	10 70	18 12	28 82	3 57	1 81	2 22
	Total	557	938	1,495	$1,665 43	$1,992 71	$3,658 14	$3 06	$2 07	$2 42

6. WAGES.

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN CITIES, 1900–1901.

Number.	COUNTIES.	Number of Teachers in Cities.			Aggregate Amount Paid Teachers Per Day.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average for all Teachers.
1	Adams	8	16	24	$20 61	$33 46	$54 07	$2 58	$2 09	$2 25
2	Allen	10	148	158	71 75	365 17	436 92	7 18	2 47	2 77
3	Bartholomew	12	30	42	50 80	80 20	131 00	4 23	2 67	3 12
4	Benton. (None reported.)									
5	Blackford	13	35	48	43 70	73 09	116 79	3 35	2 09	2 43
6	Boone	4	22	26	21 23	50 12	71 35	5 31	2 28	2 74
7	Brown. (No cities.)									
8	Carroll	4	9	13	15 91	19 27	35 18	3 98	2 14	2 70
9	Cass	9	57	66	46 06	132 37	178 43	5 12	2 32	2 70
10	Clark	8	39	47	35 82	88 91	124 73	4 48	2 28	2 65
11	Clay	6	21	27	27 97	42 50	70 47	4 66	2 02	2 61
12	Clinton	7	33	40	39 47	81 88	121 35	5 64	2 48	3 03
13	Crawford. (No cities.)									
14	Daviess	14	22	36	51 05	49 44	100 49	3 65	2 25	2 79
15	Dearborn	7	31	38	29 50	74 85	104 35	4 21	2 41	2 75
16	Decatur	4	20	24	22 50	49 50	72 00	5 63	2 48	3 00
17	Dekalb	11	18	29	33 49	32 74	66 23	3 04	1 82	2 28
18	Delaware	14	82	96	62 87	213 44	276 31	4 49	2 60	2 88
19	Dubois	6	9	15	14 69	14 67	29 36	2 45	1 63	1 96
20	Elkhart	13	98	111	61 03	248 64	309 67	4 69	2 54	2 79

21	Fayette	8	19	27	34 38	46 25	80 63	4 30	2 43	2 98
22	Floyd	14	60	74	59 75	148 32	208 07	4 27	2 47	2 87
23	Fountain	10	33	43	43 12	70 16	113 28	4 31	2 44	2 63
24	Franklin. (No cities.)									
25	Fulton. (No cities.)									
26	Gibson	9	24	33	51 14	52 85	83 99	3 46	2 80	2 55
27	Grant	19	82	101	75 24	199 12	274 36	3 43	2 43	2 72
28	Greene	2	12	14	6 00	25 50	31 50	3 00	2 13	2 25
29	Hamilton	8	20	28	29 82	48 44	78 26	3 73	2 42	2 79
30	Hancock	6	18	24	17 70	42 15	59 85	2 95	2 34	2 49
31	Harrison. (No cities.)									
32	Hendricks. (No cities.)									
33	Henry. (No cities.)									
34	Howard	11	42	56	54 56	99 36	153 92	3 90	2 37	2 75
35	Huntington	8	41	49	34 65	108 91	143 56	4 33	2 66	2 93
36	Jackson	4	24	28	15 11	53 96	69 07	3 78	2 25	2 48
37	Jasper	4	12	16	17 61	31 00	48 61	4 40	2 59	3 04
38	Jay	16	26	42	57 65	51 48	109 13	3 60	1 98	2 60
39	Jefferson	4	35	39	19 25	83 75	103 00	4 81	2 39	2 64
40	Jennings	3	10	13	9 50	19 00	28 50	3 17	1 90	2 19
41	Johnson	6	18	24	21 00	43 25	64 28	3 51	2 40	2 68
42	Knox	10	29	39	40 75	61 50	102 25	4 08	2 12	2 62
43	Kosciusko	5	14	19	11 35	32 75	44 10	2 27	2 34	2 32
44	Lagrange. (No cities.)									
45	Lake	6	67	73	31 87	157 06	188 93	5 31	2 34	2 58
46	Laporte	10	71	81	47 82	164 24	212 06	4 78	2 31	2 62
47	Lawrence	5	25	30	20 16	51 62	71 78	4 03	2 06	2 39
48	Madison	29	143	172	119 09	377 87	496 96	4 11	2 64	2 89
49	Marion	76	590	666	352 71	1,814 16	2,166 87	4 64	3 08	3 25
50	Marshall	6	12	18	23 64	30 20	53 84	3 94	2 52	2 99
51	Martin. (No cities.)									
52	Miami	6	29	35	26 09	79 13	105 22	4 35	2 73	3 01
53	Monroe	5	30	35	24 05	64 06	88 11	4 81	2 14	2 52
54	Montgomery	6	28	34	27 22	65 11	92 33	4 54	2 33	2 72
55	Morgan	7	16	23	24 61	36 24	60 85	3 52	2 27	2 65
56	Newton. (No cities.)									

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS IN CITIES, 1900–1901—Continued.

Number.	COUNTIES.	Number of Teachers in Cities.			Aggregate Amount Paid Teachers Per Day.			Average Amount Per Day.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average for all Teachers.
57	Noble	5	22	27	$24 03	$47 93	$71 96	$4 81	$2 18	$2 67
58	Ohio	5	7	12	16 50	13 00	29 50	3 30	1 86	2 46
59	Orange. (No cities.)									
60	Owen. (No cities.)									
61	Parke. (No cities.)	7	15	22	24 79	25 62	50 32	3 53	1 71	2 29
62	Perry									
63	Pike. (No cities.)	4	27	31	11 47	68 44	79 91	2 86	2 54	2 58
64	Porter	9	17	26	38 98	39 09	78 07	4 33	2 30	3 00
65	Posey									
66	Pulaski. (No cities.)	1	19	20	11 08	49 52	60 60	11 08	2 61	3 03
67	Putnam	6	29	35	29 26	67 53	96 79	4 88	2 33	2 77
68	Randolph									
69	Ripley. (No cities.)	3	19	22	19 72	44 31	64 03	6 57	2 33	2 91
70	Rush									
71	Scott. (No cities.)	8	30	38	27 41	74 50	101 91	3 43	2 48	2 68
72	Shelby									
73	Spencer. (No cities.)									
74	Starke. (No cities.)	10	135	145	52 04	335 87	387 91	5 20	2 48	2 68
75	St. Joseph									
76	Steuben. (No cities.)									
77	Sullivan. (No cities.)	1	11	12	4 75	20 62	25 37	4 75	1 87	2 11
78	Switzerland	12	69	81	72 63	186 61	259 24	6 05	2 73	3 20
79	Tippecanoe	6	11	17	22 56	27 09	49 65	3 76	2 46	2 92
80	Tipton	4	5	9	16 25	12 00	28 25	4 06	2 40	3 14
81	Union	28	211	239	120 08	543 05	663 13	4 29	2 57	2 77
82	Vanderburgh	4	10	14	15 05	21 71	36 76	3 76	2 17	2 63
83	Vermillion	28	161	189	132 24	489 56	571 90	4 73	2 32	3 03
84	Vigo									

85	Wabash										
86	Warren. (No cities.)	1	51	52	9 73	119 79	129 52	9 73	2 35	2 49	
87	Warrick. (No cities.)										
88	Washington. (No cities.)										
89	Wayne										
90	Wells	10	75	85	47 90	231 43	279 33	4 79	3 09	3 29	
91	White. (No cities.)	9	16	25	29 95	36 52	66 47	3 33	2 28	2 66	
92	Whitley										
		2	14	16	7 70	25 80	33 50	3 85	1 84	2 09	
	Total	619	3,274	3,893	$2,658 45	$8,137 68	$10,796 13	$4 38	$2 34	$2 70	

7. SCHOOL MAINTENANCE.

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1901.

(*a.*) TUITION.

Number.	COUNTIES.	Total Revenue for Tuition.	Amount Paid Teachers in Townships.	Amount Paid Teachers in Towns.	Amount Paid Teachers in Cities.	Total Paid Teachers in Counties.	Balance Tuition Fund in Counties.
1	Adams	$59,767 53	$24,510 25	$4,316 69	$8,936 68	$37,763 62	$22,003 91
2	Allen	226,603 82	52,694 63	3,733 46	84,384 81	140,812 90	85,790 92
3	Bartholomew	95,483 63	35,187 85	3,950 00	20,926 10	58,063 95	37,419 68
4	Benton	77,053 12	31,736 63	13,209 91	. . . . .	44,946 54	32,106 58
5	Blackford	51,923 68	15,372 51	. . . . .	18,773 89	34,146 40	17,778 28
6	Boone	81,961 89	38,177 61	6,966 60	9,683 76	54,827 37	27,134 52
7	Brown	20,411 66	13,936 50	720 00	. . . . .	14,656 50	5,758 16
8	Carroll	80,375 64	41,072 34	3,605 00	6,334 97	51,012 31	29,363 33
9	Cass	111,293 26	32,778 90	3,071 00	30,317 77	66,167 67	45,125 59
10	Clark	92,373 05	34,348 51	9,665 85	22,741 89	66,756 25	25,616 80
11	Clay	87,083 49	35,112 90	9,120 25	11,385 00	55,618 15	31,465 34
12	Clinton	99,805 65	41,478 62	6,868 16	20,193 99	68,540 77	31,264 88
13	Crawford	30,798 89	16,436 32	3,974 89	. . . . .	20,411 21	10,387 78
14	Daviess	85,008 90	33,775 21	4,974 75	16,689 25	55,439 21	29,569 69
15	Dearborn	74,353 79	24,434 36	6,401 68	17,971 15	48,807 19	25,546 60
16	Decatur	77,880 78	36,267 30	2,602 00	12,067 20	50,936 50	26,944 28
17	Dekalb	78,984 02	25,566 22	8,841 88	11,923 30	46,331 40	32,652 62
18	Delaware	180,796 51	54,281 75	7,266 34	46,784 08	108,332 17	72,464 34
19	Dubois	56,674 51	27,317 23	4,592 50	5,109 65	37,019 38	19,655 13
20	Elkhart	128,575 05	38,733 70	7,654 01	50,316 81	96,704 52	31,870 53

21	Fayette	42,634 24	15,649 55	1,015 00	12,961 29	29,625 84	13,008 40
22	Floyd	77,305 28	12,031 03	1,997 50	37,353 65	51,382 18	25,923 10
23	Fountain	73,895 36	32,984 22		16,298 75	49,282 97	24,612 39
24	Franklin	55,173 59	28,349 35	7,516 90		35,866 25	19,307 34
25	Fulton	57,107 94	28,017 39	10,095 00		38,112 39	18,995 55
26	Gibson	101,360 76	46,893 71	3,279 43	12,490 50	62,663 64	38,697 12
27	Grant	176,586 97	44,603 49	16,095 70	49,100 01	109,799 20	66,787 77
28	Greene	73,710 77	36,881 95	6,580 46	4,945 50	48,407 91	25,302 86
29	Hamilton	92,510 08	42,135 11	7,480 75	11,686 40	61,302 26	31,207 82
30	Hancock	69,991 86	30,902 58	4,430 00	10,549 80	45,882 38	24,109 48
31	Harrison	56,342 08	30,665 50	7,499 15		38,164 65	18,177 43
32	Hendricks	75,531 27	42,958 88	6,287 50		49,246 38	26,284 89
33	Henry	86,901 88	36,691 57	14,190 25		50,881 82	36,020 06
34	Howard	94,131 19	30,748 45	2,503 09	26,680 62	59,932 16	34,199 03
35	Huntington	103,538 67	30,673 48	9,540 67	24,040 61	64,254 76	39,383 91
36	Jackson	75,535 74	30,155 75	4,967 75	11,904 55	47,028 05	28,507 69
37	Jasper	65,499 11	29,596 90	4,680 00	7,550 00	41,826 90	23,672 21
38	Jay	79,483 51	30,980 75	4,240 75	17,093 87	52,315 37	27,168 14
39	Jefferson	64,322 16	22,695 34	2,046 36	18,037 50	42,779 20	21,542 96
40	Jennings	45,904 88	22,670 25	1,560 00	5,130 00	29,360 25	16,544 63
41	Johnson	69,804 23	29,031 82	6,161 50	9,755 85	44,949 17	24,855 06
42	Knox	94,905 94	44,299 15		18,450 00	62,749 15	32,156 79
43	Kosciusko	102,708 04	42,097 82	10,614 32	8,070 22	60,782 36	41,925 68
44	Lagrange	53,757 00	29,578 50	5,884 50		35,463 00	18,294 00
45	Lake	169,847 90	47,829 61	19,371 00	34,643 17	101,843 78	68,004 12
46	Laporte	141,548 71	43,752 60	1,480 00	40,412 78	85,645 38	55,903 33
47	Lawrence*	72,060 84	30,139 70	3,216 37	12,432 50	45,788 57	*26,256 48
48	Madison	241,607 71	57,334 34	14,150 88	82,466 12	153,951 34	87,656 37
49	Marion	280,442 95	62,692 67	5,142 50	175,933 68	243,786 85	36,674 10
50	Marshall	83,349 27	33,298 40	9,985 89	8,191 32	51,475 61	31,873 66
51	Martin	33,570 86	18,271 60	3,852 90		22,124 50	11,446 36
52	Miami	102,422 80	40,102 27	5,164 50	18,940 45	64,207 22	38,215 58
53	Monroe	60,192 52	22,434 42	1,388 04	14,439 00	38,261 46	21,931 06
54	Montgomery	111,850 33	50,730 79	9,269 39	16,619 69	76,619 89	35,230 46
55	Morgan	66,952 09	34,085 26	2,890 00	8,955 24	45,930 50	21,021 59
56	Newton	56,018 78	25,004 87	10,877 44		35,882 31	20,136 47

*Balance tuition fund in county, $15.79. Short on account of error in settlement.

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1901—Continued.

(*a.*) TUITION.

Number.	COUNTIES.	Total Revenue for Tuition.	Amount Paid Teachers in Townships.	Amount Paid Teachers in Towns.	Amount Paid Teachers in Cities.	Total Paid Teachers in Counties.	Balance Tuition Fund in Counties.
57	Noble	$78,733 50	$30,284 90	$4,131 11	$13,059 97	$47,475 98	$31,257 52
58	Ohio	16,072 13	5,357 88		4,240 00	9,597 88	6,474 25
59	Orange	39,830 86	22,401 61	5,805 00		28,206 61	11,624 25
60	Owen	43,254 25	24,178 10	6,840 00		31,018 10	12,236 15
61	Parke	85,375 34	43,213 65	8,147 52		51,361 17	34,014 17
62	Perry	44,120 93	20,178 60	1,232 50	8,031 93	29,443 03	14,677 90
63	Pike	50,048 79	26,359 02	5,618 00		31,977 02	18,071 77
64	Porter	96,043 23	39,744 65	1,950 00	14,630 20	56,324 85	39,718 38
65	Posey	84,761 57	35,783 25	6,259 25	11,254 94	53,297 44	31,464 13
66	Pulaski	50,668 07	26,924 86	5,838 92		32,763 78	17,904 29
67	Putnam	75,995 79	34,039 75	5,034 59	9,909 07	48,983 41	27,012 38
68	Randolph	97,543 68	38,054 42	7,418 89	14,249 30	59,722 61	37,821 07
69	Ripley	49,522 31	25,480 32	7,545 00		33,025 32	16,496 99
70	Rush	72,546 76	33,364 04	3,440 00	10,227 50	47,031 54	25,515 22
71	Scott	21,381 00	11,716 80	2,680 00		14,396 80	6,984 20
72	Shelby	101,736 06	43,457 52	1,379 00	17,734 25	62,570 77	39,165 29
73	Spencer	63,360 59	29,551 04	15,530 15		45,081 19	18,279 40
74	Starke	39,170 07	18,125 48	6,499 25		24,624 73	14,545 34
75	St Joseph	190,961 57	39,796 87	5,777 32	64,644 64	110,217 83	80,743 74
76	Steuben	40,350 65	22,471 37	7,368 00		29,839 37	10,511 28
77	Sullivan	80,325 56	38,406 80	13,442 11		51,848 91	28,476 65
78	Switzerland	31,420 23	14,897 15	1,425 00	3,632 50	19,954 65	11,465 58
79	Tippecanoe	170,404 18	50,884 47	6,883 12	47,356 25	105,123 84	65,280 34
80	Tipton	57,747 54	27,876 23	2,466 80	8,061 61	38,404 64	19,342 90
81	Union	37,905 75	16,024 38	967 50	4,532 50	21,524 38	16,381 37
82	Vanderburgh	194,955 01	29,957 40		133,110 50	163,067 90	31,887 11
83	Vermillion	53,848 30	26,044 00	6,348 49	5,619 15	38,011 64	15,836 66
84	Vigo	189,989 95	45,866 30	1,364 75	99,619 85	146,850 90	43,139 05

85	Wabash	111,200 53	45,976 94	8,538 15	21,560 69	76,075 78	35,124 75
86	Warren	49,987 62	26,721 04	6,339 03	. . . . .	33,060 07	16,927 55
87	Warrick	56,414 58	30,257 77	8,682 23	. . . . .	38,940 00	17,474 58
88	Washington	53,896 46	27,560 20	8,700 60	. . . . .	36,260 80	17,635 66
89	Wayne	153,813 28	34,576 90	11,660 00	47,154 15	93,391 05	60,422 23
90	Wells	67,239 29	33,839 05	. . .	10,741 28	44,580 33	22,658 96
91	White	81,942 14	35,125 38	18,163 25	. . . . .	53,289 63	28,652 51
92	Whitley	63,016 43	29,648 72	4,390 00	6,848 19	40,886 91	22,129 52
	Total	$7,499,664 90	$2,789,305 14	$518,922 13	$1,622,065 70	$4,930,292 97	$2,569,356 14

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1901.

(b.) SPECIAL SCHOOL REVENUE.

Number.	COUNTIES.	Total Special School Revenue.	Amount Paid for Building and Repairs in Townships.	Amount Paid for Building and Repairs in Towns.	Amount Paid for Building and Repairs in Cities.	Total Amount Paid for Building and Repairs in Counties.	Amount Paid for Transfer of Pupils in Townships.	Amount Paid for Transfer of Pupils in Towns.	Amount Paid for Transfer of Pupils in Cities.	Total Amount Paid for Transfer of Pupils in Counties.
1	Adams	$42,013 24	$12,173 93	$366 65	$150 00	$12,690 58	$403 62	$4 50		$408 12
2	Allen	133,822 76	11,372 78		15,287 90	26,660 68	3,545 12			3,545 12
3	Bartholomew	48,159 77	1,265 09	234 91	390 00	1,890 00	3,465 40			3,465 40
4	Benton	52,489 64	13,810 35	483 53		14,293 88	2,612 38			2,612 38
5	Blackford	32,452 09	4,452 40			4,452 40	694 42			694 42
6	Boone	41,734 83	5,213 18		2,094 80	7,307 98	3,540 96			3,540 96
7	Brown	5,850 88	1,239 27			1,239 27				
8	Carroll	42,946 31	3,027 73	333 51	756 00	4,117 24	4,588 88			4,588 88
9	Cass	64,138 57	3,594 91			3,594 91	4,606 12			4,606 12
10	Clark	36,739 61	841 95	108 75		950 70	3,095 97	186 25	$27 00	3,309 22
11	Clay	42,106 69	3 056 71	31 86		3,088 57	2,424 95			2,424 95
12	Clinton	47,985 67	1,412 16	562 00	1,121 65	3,095 81	3,503 45	18 00		3,521 45
13	Crawford	13,082 93	2,842 58			2,842 58	911 05			911 05
14	Daviess	50,791 48	8,138 73		5,027 05	13,165 78	3,258 45			3,258 45
15	Dearborn	29,542 71	2,257 74	73 15	2,659 92	4,990 81	2,074 27	122 00		2,196 27
16	Decatur	26,684 35	1,330 66			1,330 66	1,454 72			1,454 72
17	Dekalb	36,905 04	1,778 31		5,366 17	7,144 48	2,687 35			2,687 35
18	Delaware	116,654 52	10,245 88	200 00	25,065 26	35,511 14	2,908 72		594 45	3,503 17
19	Dubois	19,783 07	970 31			970 31	3,214 30			3,214 30
20	Elkhart	69,853 36	7,457 19	312 00	6,800 00	14,569 19	885 00		2,250 00	3,135 00

21	Fayette	20,216 29	160 64	241 17	1,438 00	1,839 81	1,027 00			1,027 00
22	Floyd	50,060 54	3,496 43		3,672 70	7,169 13	1,357 67	72 00		1,429 67
23	Fountain	74,135 42	22,071 48		2,073 21	24,144 69	760 10			760 10
24	Franklin	14,846 25	432 57			432 57	1,815 87			1,815 87
25	Fulton	34,296 53	3,220 80			3,220 80	4,461 21			4,461 21
26	Gibson	59,998 67	6,911 08		15,870 00	22,781 08	1,294 00			1,294 00
27	Grant	104,124 39	5,630 26	6,748 16	13,722 30	26,100 72	6,692 16		13 50	6,705 66
28	Greene	30,409 52	3,990 49		1,015 18	5,005 67	410 50			410 50
29	Hamilton	46,353 78	8,165 47	1,263 03		9,428 50	4,365 96			4,365 96
30	Hancock	48,786 18	16,891 92		1,436 71	18,328 63	2,001 99			2,001 99
31	Harrison	23,518 32	1,872 91	303 18		2,176 09	2,759 22	37 00		2,796 22
32	Hendricks	52,842 00	11,844 55	3,615 20		15,459 95	2,346 30			2,346 30
33	Henry	70,113 22	8,287 21	586 31		8,873 52	3,783 06			3,783 06
34	Howard	55,595 22	4,105 37		340 50	4,445 87	4,493 40		77 00	4,570 40
35	Huntington	49,637 41	1,020 48	135 54		1,156 02	1,566 65			1,566 65
36	Jackson	51,790 28	7,415 16	7,874 81		15,289 97	1,302 50			1,302 50
37	Jasper	35,335 22	4,311 32	218 27	1,337 56	5,867 15	2,874 40			2,874 40
38	Jay	46,128 90	7,312 28		100 00	7,412 28	1,238 79			1,238 79
39	Jefferson	22,703 91	1,168 46	47 85	3,279 39	4,495 70	1,157 50	50 00		1,207 50
40	Jennings	16,645 64	2,763 58	280 83		3,044 41	992 98			992 98
41	Johnson	37,307 68	601 62	1,504 00	37 40	2,143 02	2,277 00			2,277 00
42	Knox	60,392 70	2,617 44		2,500 00	5,117 44	764 90			764 90
43	Kosciusko	48,864 28	2,130 44	704 00	1,149 56	3,984 00	2,527 27		1 88	2,529 15
44	Lagrange	33,389 60	4,492 94	2,200 00		6,692 94	2,080 50			2,080 50
45	Lake	88,102 06	9,021 31	122 64	5,994 35	15,138 30	1,209 00			1,209 00
46	Laporte	78,103 52	7,350 10		200 00	7,550 10	2,570 87			2,570 87
47	Lawrence	27,757 85	2,567 22		1,458 21	4,025 43	1,201 55			1,201 55
48	Madison	164,431 98	16,182 91	13,233 40	13,265 32	42,681 63	2,166 07	46 00		2,212 07
49	Marion	639,553 47	7,485 55	2,540 00	15,480 00	25,505 55	4,326 75	48 80	67 50	4,443 05
50	Marshall	46,286 76	3,251 64	927 26		4,178 90	4,315 69			4,315 69
51	Martin	10,582 11	1,166 50	114 15		1,280 65	395 01	24 00		419 01
52	Miami	74,914 13	30,543 40			30,543 40	3,750 50			3,750 50
53	Monroe	32,637 54	419 40	289 62	11,291 04	12,000 06	1,072 50			1,072 50
54	Montgomery	85,197 51	18,818 24	166 59	5,700 00	24,684 83	2,826 50		90 00	2,916 50
55	Morgan	60,284 68	10,990 80	14 79	18,087 27	29,092 86	3,284 86			3,284 86
56	Newton	30,827 17	781 45	863 83		1,645 28	669 73	99 66		769 39

Number.	COUNTIES.	Total Special School Revenue	Amount Paid for Building and Repairs in Townships.	Amount Paid for Building and Repairs in Towns.	Amount Paid for Building and Repairs in Cities.	Total Amount Paid for Building and Repairs in Counties.	Amount Paid for Transfer of Pupils in Townships.	Amount Paid for Transfer of Pupils in Towns.	Amount Paid for Transfer of Pupils in Cities.	Total Amount Paid for Transfer of Pupils in Counties.
57	Noble	$33,847 77	$2,684 34	$885 72	$4,000 00	$7,570 06	$1,882 56			$1,882 56
58	Ohio	6,358 29	163 91		100 00	263 91	631 55			631 55
59	Orange	14 015 38	1,347 35	299 31		1,646 66	1,276 24			1,276 24
60	Owen	16,837 96	1,936 74			1,936 74	2,264 97			2,264 97
61	Parke	43,550 04	3,184 88	4,136 89		7,321 77	2,457 10			2,457 10
62	Perry	18,730 68	1,606 95		659 86	2,266 81				
63	Pike	22,614 70	4,712 80			4,712 80	1,290 85			1,290 85
64	Porter	55.684 44	4,591 19			4,591 19	2,313 50			2,313 50
65	Posey	39,995 71	5,720 44		97 39	5,817 83	1,697 50			1,697 50
66	Pulaski	24,791 47	3,672 48			3,672 48	1,236 10			1,236 10
67	Putnam	38,468 30	3,745 22	264 43	1,519 52	5,529 17	3,057 10			3,057 10
68	Randolph	48,691 64	3,481 25	927 50	949 60	5,358 35	2,171 50			2,171 50
69	Ripley	19,465 32	2,376 05	2,233 75		4,609 80	2,360 30			2,360 30
70	Rush	36,237 75	1,242 54		98 48	1,341 02	3,048 78	$10 50		3,059 28
71	Scott	6,421 56	913 00	172 97		1,085 97	91 00			91 00
72	Shelby	50,317 70	10,037 95	327 57		10,365 52	4,531 60			4,531 60
73	Spencer	29,469 29	1,212 40	5,761 90		6,974 30	1,236 75			1,236 75
74	Starke	22,290 62	4,376 22			4,376 22	552 73			552 73
75	St. Joseph	100,068 47	4,696 25	34 46	6,429 84	11,160 55	1,747 80			1,747 80
76	Steuben	20,287 17	2,032 52	297 35		2,329 87	1,124 65			1,124 65
77	Sullivan	45,057 25	8,024 00	1,500 00		9,524 00	2,100 87			2,100 87
78	Switzerland	9,673 96	312 29			312 29	1,315 85			1,315 85
79	Tippecanoe	130,947 12	11,013 47	3,004 20	46,097 65	60,115 32	1,233 25			1,233 25
80	Tipton	43,305 19	11,172 53			11,172 53	1,078 47			1,078 47
81	Union	15,008 94	1,520 66	300 00	500 00	2,320 66	1,441 16			1,441 16
82	Vanderburgh	65,423 43	6,340 24		20,296 97	26,637 21	2,292 97			2,292 97
83	Vermillion	24,230 81	641 91	46 85		688 76	693 00			693 00
84	Vigo	134,316 68	18,787 95		562 72	19,350 67	4,586 25	52 00		4,638 25

85	Wabash	46,438 76	. . . .	664 57	8,563 07	9,227 64	1,489 94	. . . . .	$88 80	1,578 74
86	Warren	24,963 88	3,691 50	. . . . .	. . . . .	3,691 50	1,287 53	. . . . .	. . . .	1,287 53
87	Warrick	20,400 23	1,410 15	400 00	. . . . .	1,810 15	1,856 70	. . . . .	. . . . .	1,856 70
88	Washington	46,703 66	2,952 04	24,352 20	. . . . .	27,304 24	1,738 25	. . . . .	. . . . .	1,738 25
89	Wayne	108,239 36	18,969 34	228 15	7,000 00	26,197 49	4,010 71	. . . . .	. . . . .	4,010 71
90	Wells	47,413 75	9,916 02	. . . .	. . . . .	9,916 02	1,171 50	. . . . .	. . . . .	1,171 50
91	White	52,201 98	6,654 82	8,933 84	. . . .	15,588 66	873 80	. . . . .	. . . . .	873 80
92	Whitley	22,838 63	1,636 09	336 95	439 56	2,412 60	783 50	. . . .	. . . .	783 50
	Total	$1,865,197 14	$502,752 77	$101,809 60	$281,482 11	$886,044 48	$193,941 42	$770 71	$3,210 13	$197,922 26

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1901—Continued.

SPECIAL SCHOOL REVENUE—Continued.

Number.	COUNTIES.	Amount Paid for Supervision in Townships.	Amount Paid for Supervision in Towns.	Amount Paid for Supervision in Cities.	Total Am't Paid for Supervision in Counties.	Amount Otherwise Expended in Townships Since July 31, 1900.	Amount Otherwise Expended in Towns Since July 31, 1900.	Amount Otherwise Expended in Cities Since July 31, 1900.	Total in Counties.
1	Adams					$7,519 17	$1,103 71	$5,406 76	$14,029 64
2	Allen	$403 58	$306 25	$3,000 00	$3,709 83	19,005 23	813 68	22,533 66	42,352 57
3	Bartholomew			2,655 00	2,655 00	8,773 77	1,384 80	13,358 99	23,517 56
4	Benton		2,307 00		2,307 00	13,181 91	6,659 81		19,841 72
5	Blackford			2,200 00	2,200 00	7,471 78		4,870 55	12,342 33
6	Boone		620 00	1,998 00	2,618 00	13,270 88	2,442 14	1,188 00	16,901 02
7	Brown					3,017 85	119 84		3,137 59
8	Carroll	672 91		900 00	1,572 91	16,730 74	768 97	1,829 12	19,328 83
9	Cass			2,385 00	2,385 00	11,879 19	1,008 16	16,800 41	29,687 76
10	Clark		1,000 00	3,022 50	4,022 50	5,794 46	2,318 30	5,194 29	13,307 05
11	Clay		80 00	1,300 00	1,380 00	10,029 38	2,051 63	4,470 16	16,551 17
12	Clinton	64 00	611 00	1,650 00	2,325 00	16,782 45	2,771 87	8,139 10	27,693 42
13	Crawford		88 91		88 91	3,996 72	1,471 38		5,468 10
14	Daviess			1,400 00	1,400 00	12,386 36	3,483 85	10,249 02	26,119 23
15	Dearborn	30 00	99 00	930 00	1,059 00	7,677 61	1,402 75	3,120 98	12,201 34
16	Decatur	41 00	63 65	900 00	1,004 65	8,841 25	811 01	3,988 21	13,640 47
17	Dekalb	44 77	1,386 00		1,430 77	8,301 25	3,159 78	3,364 78	14,825 81
18	Delaware	323 10	692 75	2,400 00	3,415 85	16,145 87	2,270 50	26,102 26	44,518 63
19	Dubois	107 75		14 00	121 75	6,844 18	918 05	2,197 81	9,960 04
20	Elkhart					10,804 12	3,143 05	20,556 85	34,504 02

21	Fayette	242 50		420 00	662 50	4,746 00	209 81	4,601 36	9,557 17
22	Floyd			1,229 35	1,229 35	3,093 70	321 60	7,553 49	10,968 79
23	Fountain			3,506 52	3,506 52	26,682 38		5,589 42	32,271 80
24	Franklin		100 00		100 00	5,630 38	1,829 99		7,460 37
25	Fulton	2,380 28	1,540 00		3,920 28	6,148 52	4,056 99		10,205 42
26	Gibson	510 15	900 00		1,410 15	13,521 35	1,564 47	4,144 69	19,230 51
27	Grant		1,687 55	600 00	2,287 55	12,779 30	7,980 41	20,696 51	41,456 22
28	Greene		1,379 54		1,379 54	10,956 07	2,710 62	1,355 62	15,022 31
29	Hamilton	1,958 29	212 50	1,100 00	3,270 79	14,366 12	2,381 14	4,264 07	21,010 33
30	Hancock	65 00		650 00	715 00	13,733 80	1,124 85	3,901 49	18,760 14
31	Harrison	179 48			179 48	5,293 73	2,072 88		7,366 61
32	Hendricks	158 25	90 00		248 25	21,377 81	3,168 68		24,546 49
33	Henry	230 80	1,138 36		1,369 16	18,933 12	11,616 02		30,549 14
34	Howard		416 91	1,600 00	2,016 91	8,943 80	590 15	17,973 46	27,507 41
35	Huntington	33 00	365 00	1,800 00	2,198 00	13,879 72	2,519 08	13,280 34	29,679 14
36	Jackson		125 00	805 00	930 00	12,733 36	5,218 31	5,304 36	23,256 03
37	Jasper		400 00		400 00	7,384 68	1,579 69	4,389 13	13,353 50
38	Jay	70 00		2,295 00	2,365 00	9,882 52	2,009 87	7,508 04	19,490 43
39	Jefferson			650 00	650 00	4,991 90	361 69	4,836 36	10,189 95
40	Jennings					5,357 41	572 32	1,804 26	7,733 99
41	Johnson	431 00	16 00	1,804 95	2,251 95	11,348 61	4,857 59	3,039 85	19,246 05
42	Knox	1,265 41		2,000 00	3,265 41	17,950 76		10,475 36	28,426 12
43	Kosciusko	143 50	220 66	1,562 71	1,926 87	12,246 49	3,948 06	3,521 83	19,716 38
44	Lagrange	255 00	1,100 00		1,355 00	12,436 95	4,377 94		16,814 89
45	Lake	548 10	460 00	2,618 75	3,626 85	13,044 44	11,311 80	21,148 62	45,504 86
46	Laporte	78 00		2,000 00	2,078 00	16,556 72	1,063 33	13,246 59	30,866 64
47	Lawrence		810 00	500 00	1,310 00	7,977 93	1,432 87	4,183 43	13,594 23
48	Madison	2,580 48	1,109 00	7,130 00	10,819 48	25,915 78	6,512 72	45,963 08	78,391 58
49	Marion	504 00	750 00	90,536 80	91,790 80	23,784 04	2,553 50	336,630 81	362,963 35
50	Marshall	435 02	340 00		775 02	8,481 04	4,867 20	10,533 94	23,882 18
51	Martin		392 00		392 00	3,768 89	1,256 44		5,025 33
52	Miami	20 00	810 00		830 00	15,809 99	2,044 98	12,816 32	30,671 29
53	Monroe			1,742 30	1,742 30	5,226 78	409 66	6,852 82	12,489 26
54	Montgomery	402 02	439 41	325 00	1,166 43	21,559 57	4,863 75	4,260 87	30,584 19
55	Morgan		375 00	1,998 50	2,373 50	12,708 50	785 91	4,750 19	18,244 60
56	Newton	52 00			52 00	9,753 54	7,421 74		17,175 28

Number.	COUNTIES.	Amount Paid for Supervision in Townships.	Amount Paid for Supervision in Towns.	Amount Paid for Supervision in Cities.	Total Am't Paid for Supervision in Counties.	Amount Otherwise Expended in Townships Since July 31, 1901.	Amount Otherwise Expended in Towns Since July 31, 1900.	Amount Otherwise Expended in Cities Since July 31, 1900.	Total in Counties.
57	Noble	$52 00			$52 00	$10,401 90	$799 02	$1,788 03	$12,988 95
58	Ohio					1,299 53		2,430 65	3,730 18
59	Orange		$90 00		90 00	3,784 04		2,011 44	5,795 48
60	Owen	1,250 42	800 00		2,050 42	4,270 68	1,422 75		5,693 43
61	Parke		120 00		120 00	15,015 44	3,668 32		18,683 76
62	Perry					8,107 74	315 12	3,540 13	11,962 99
63	Pike	100 45	150 00		250 45	5,504 58	996 40		6,500 98
64	Porter		325 00		325 00	17,580 95	339 87	11,621 94	29,542 76
65	Posey		455 00	$1,400 00	1,855 00	10,172 56	1,271 74	3,077 03	14,521 33
66	Pulaski		943 75		943 75	8,073 03	2,398 87		10,471 90
67	Putnam	250 00		1,000 00	1,250 00	11,085 92	1,725 41	3,962 32	16,773 65
68	Randolph		75 00	2,242 47	2,317 47	13,591 69	2,958 95	9,569 50	26,120 14
69	Ripley	148 50	72 50		221 00	4,813 16	2,318 39		7,131 55
70	Rush	155 00		2,320 00	2,475 00	13,708 94	1,292 25	3,704 57	18,705 76
71	Scott					3,560 59	957 21		4,517 80
72	Shelby		110 00	1,800 00	1,910 00	12,468 97	751 02	6,500 24	19,720 23
73	Spencer	20 00	1,169 00		1,189 00	7,572 84	5,630 79		13,203 63
74	Starke	411 50	180 00		591 50	3,372 25	2,522 18		5,894 43
75	St. Joseph	374 40	604 69	2,000 00	2,971 09	13,297 18	1,475 28	75,240 81	90,013 27
76	Steuben	40 00	800 00		840 00	7,676 69	2,739 83		10,416 52
77	Sullivan		175 00		175 00	10,475 81	4,381 36		14,857 17
78	Switzerland		210 00	427 50	637 50	4,572 06	334 32	831 70	5,738 08
79	Tippecanoe			1,900 00	1,900 00	18,791 44		11,738 19	30,529 63
80	Tipton			378 29	378 29	15,055 60	1,582 09	2,831 15	19,468 84
81	Union	780 00	347 50	875 00	2,002 50	3,999 94	294 51	1,105 79	5,400 24
82	Vanderburgh					12,776 82		42,117 93	54,894 75
83	Vermillion					7,046 80	3,315 48	2,402 11	12,764 39
84	Vigo			3,000 00	3,000 00	11,623 08	431 44	35,909 80	47,964 32

85	Wabash	134 00	586 85	2,400 00	3,120 85	11,503 42	2,923 24	9,980 77	24,407 43
86	Warren		457 50		457 50	8,379 49	2,560 90		10,940 39
87	Warrick	247 13	507 87		755 00	5,021 39	2,220 11		7,241 50
88	Washington	122 67	1,270 00		1,392 67	5,029 48	3,328 35		8,357 83
89	Wayne	2,425 00	2,402 50	5,000 00	9,827 50	13,539 52	5,111 98	18,489 94	37,141 44
90	Wells			1,362 50	1,362 50	15,309 94		4,783 17	20 093 11
91	White		500 00		500 00	11,951 37	6,288 70		18,240 07
92	Whitley		842 25	450 00	1,292 25	8,345 21	1,539 33	2,088 58	11,973 12
	Total	$20,740 46	$35,625 90	$178,185 14	$234,551 50	$986,239 92	$215,494 36	$993,722 05	$2,195,456 33

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1901—Continued.

SPECIAL SCHOOL REVENUE—Continued—AND INDEBTEDNESS.

Number.	COUNTIES.	Amount on Hand July 31, 1900, Including Any Amt due for poration Still in Co. Treas'y.	Amount on Hand in Towns July 31, 1900.	Amount on Hand in Cities July 31, 1900.	Total on Hand in Counties July 31, 1900.	Indebtedness for School Purposes in Townships July 31, 1901.	Indebtedness for School Purposes in Towns July 31, 1901.	Indebtedness for School Purposes in Cities July 31, 1901.	Total Indebtedness for School Purposes in Counties July 31, 1901.
1	Adams	$13,115 29	$1,267 80	$501 81	$14,884 90	$4,500 00		$3,082 89	$7,582 89
2	Allen	14,781 09	744 01	42,029 46	57,554 56	18,731 20			18,731 20
3	Bartholomew	7,636 27	696 12	9,299 42	17,631 81	9,500 00		6,000 00	15,500 00
4	Benton	11,425 11	2,000 55		13,425 66	9,611 00	$300 00		9,911 00
5	Blackford	7,347 70		5,415 24	12,762 94	1,778 96		31,000 00	32,778 96
6	Boone	9,178 28	2,188 59		11,366 87	10,425 00	600 00		11,025 00
7	Brown	1,316 72	157 30	1,474 02	1,214 07				1,214 07
8	Carroll	10,678 04	1,143 56	1,516 85	13,338 45	36,528 00			36,528 00
9	Cass	12,088 83	1,095 43	10,680 52	23,864 78	9,995 47		50,000 00	59,995 47
10	Clark	5,283 89	1,077 66	8,788 59	15,150 14	8,881 32	2,053 70		10,935 02
11	Clay	4,472 33	1,074 45	13,115 22	18,662 00	5,107 08			5,107 08
12	Clinton	7,213 06	1,291 23	2,845 70	11,349 99	11,278 46	540 00		11,818 46
13	Crawford	2,700 59	1,071 70		3,772 29	10,918 50	2,548 87		13,467 37
14	Daviess	4,234 67	567 06	2,046 29	6,848 02	12,032 18	8,190 90	4,000 00	25,123 08
15	Dearborn	3,404 66	1,539 37	4,151 26	9,095 29	800 00			800 00
16	Decatur	8,828 34	354 64	70 87	9,253 85		449 00	700 00	1,149 00
17	Dekalb	7,793 33	860 26	2,247 10	10,900 69	4,701 99	84 06	3,098 90	7,884 95
18	Delaware	22,575 10	3,983 61	3,147 02	29,705 73	23,525 09	666 65	40,000 00	64,191 65
19	Dubois	3,548 86	628 90	1,411 26	5,589 02	3,486 67	1,180 00	2,000 00	6,666 67
20	Elkhart	10,787 98	5,283 82	1,573 35	17,645 15	5,000 00		9,000 00	14,000 00

21	Fayette	5,542 30		1,816 26	7,358 56	4,925 00		21,500 00	26,425 00
22	Floyd	2,526 81	708 57	26,028 22	29,263 60	3,919 40			3,919 40
23	Fountain	10,230 02		3,222 29	13,452 31	45,729 00			45,729 00
24	Franklin	3,428 95	1,608 49		5,037 44	1,287 56	251 13		1,538 49
25	Fulton	7,992 12	4,496 70		12 488 82				
26	Gibson	13,828 15	1,457 02		15,285 17	7,595 45		4,979 35	12,574 80
27	Grant	16,832 65	4,366 95	6,374 64	27,574 24	7,299 75	28,950 00	56,591 00	92,840 75
28	Greene	7,538 95	1,052 55		8,591 50	3,181 50	1,153 07	3,121 30	7,455 87
29	Hamilton	4,573 13	2,211 42	1,493 65	8,278 20				
30	Hancock	4,954 68	557 55	3,468 19	8,980 42	10,442 00		7,856 18	18,298 18
31	Harrison	6,706 04	4,293 88		10,999 92	1,536 60			1,536 60
32	Hendricks	7,721 60	2,519 61		10,241 21	27,522 87	4,107 54		31,630 41
33	Henry	14,139 25	11,399 09		25,538 34	31,270 80	33,200 00		64,470 80
34	Howard	4,927 73	1,273 25	10,853 65	17,054 63	3,215 85		10,000 00	13,215 85
35	Huntington	5,243 31	3,490 35	6,303 64	15,037 60	13,860 00			13,860 00
36	Jackson	3,506 08	2,696 05	4,809 65	11,011 78	9,224 68	8,865 00		18,089 68
37	Jasper	9,093 20	1,032 70	2,830 15	12,956 05	4,132 14			4,132 14
38	Jay	5,142 01	2,058 19	8,512 20	15,712 40	11,980 40	19,050 00	18,000 00	49,030 40
39	Jefferson	4,132 49	287 26	1,741 01	6,160 76	2,684 00	75 00		2,759 00
40	Jennings	4,635 94		660 12	5,296 06	1,479 30			1,479 30
41	Johnson	7,694 80	1,023 73	2,671 13	11,389 66	3 749 99	499 93		4.249 92
42	Knox	11,779 83		11,039 00	22,818 83	21,398 00		30,000 00	51,398 00
43	Kosciusko	12,181 36	4,730 30	3,796 22	20,707 88		708 00		708 00
44	Lagrange	6,094 33	351 94		6,446 27	12,385 00	4,175 83		16,560 83
45	Lake	8,329 58	5,819 19	8,474 28	22,623 05	1,400 00	3,500 00	61,172 00	66,072 00
46	Laporte	10,564 44	60 84	24,412 63	35,037 91	9,400 00	1,200 00		10,600 00
47	Lawrence	5,505 06	1,142 66	978 92	7,626 64	1,700 00			1,700 00
48	Madison	13,730 22	6,365 89	11,231 11	30,327 22	24,669 74	13,907 15		38,576 89
49	Marion	10,607 59	457 33	143,780 80	154,845 72	19,239 93	3,577 53	896,153 63	918,971 09
50	Marshall	9,981 20	3,143 77		13,124 97	2,294 00	6,925 00		9,219 00
51	Martin	2,705 13	910 46		3,615 59	3.613 54	920 66		4,534 20
52	Miami	5,668 36	1,430 15	2,020 43	9,118 94	23,689 25	566 66	12,550 00	36,805 91
53	Monroe	4,602 57	492 33	238 52	5,333 42				
54	Montgomery	17,382 07	1,582 15	6,881 34	25,845 56	26,011 28	227 27		26,238 55
55	Morgan	6,407 98	880 88		7,288 86	15,259 00			15,259 00
56	Newton	6,322 29	4,862 93		11,185 22	6,572 35	7,037 78		13,610 13

Number.	COUNTIES.	Amount on Hand July 31, 1900, Including Any Am't Due Corporation Still in Co. Treas'y.	Amount on Hand in Towns July 31, 1900.	Amount on Hand in Cities July 31, 1900.	Total on Hand in Counties July 31, 1900.	Indebtedness for School Purposes in Townships July 31, 1901.	Indebtedness for School Purposes in Towns July 31, 1901.	Indebtedness for School Purposes in Cities July 31, 1901.	Total Indebtedness for School Purposes in Counties July 31, 1901.
57	Noble	$3,232 42	$1,154 48	$6,967 30	$11,354 20				
58	Ohio	445 04		1,287 61	1,732 65	$200 00			$200 00
59	Orange	3,399 07		2,026 69	5,425 76		$500 00		500 00
60	Owen	1,771 61	3,120 79		4,892 40				
61	Parke	14,136 94	830 47		14,967 41	15,941 50	2,518 93		18,460 43
62	Perry	1,676 15	342 53	2,482 20	4,500 88	13,250 00			13,250 00
63	Pike	6,016 45	3,843 17		9,859 62	5,130 00			5,130 00
64	Porter	13,271 99	375 36	5,264 64	18,911 99				
65	Posey	12,207 58	1,095 61	2,800 86	16,104 05	16,513 00	1,500 00	$735 00	18,748 00
66	Pulaski	6,539 72	1,927 52		8,467 24	9,746 54	3,419 50		13,166 04
67	Putnam	8,749 66	1,335 64	1,825 89	11,911 19	1,835 80	244 40		2,080 20
68	Randolph	6,079 79	1,957 85	4,686 54	12,724 18	1,685 95	1 500 00	5,000 00	8,185 95
69	Ripley	3,972 80	1,169 87		5,142 67	6,460 00	6,600 00		13,060 00
70	Rush	6,621 46	597 49	3,437 74	10,656 69	1,300 00			1,300 00
71	Scott	1,033 51			1,033 51	5,950 81	4,300 00		10,250 81
72	Shelby	6,555 36	192 38	7,042 61	13,790 35	7,006 00			7,006 00
73	Spencer	5,505 03	1,360 58		6,865 61	6,097 77	6,300 00		12,397 77
74	Starke	8,757 51	2,118 23		10,875 74	802 11			802 11
75	St. Joseph	6,711 94	845 88	5,144 49	12,702 31	4,040 00	370 00	28,000 00	29,410 00
76	Steuben	5,272 68	303 45		5,576 13	10,650 00	1,964 00		12,614 00
77	Sullivan	13,222 85	5,177 36		18,400 21	1,200 00	2,084 61		3,284 61
78	Switzerland	1,119 11	78 19	472 94	1,670 24	866 66			866 66
79	Tippecanoe	25,580 74	3,336 61	8,251 57	37,168 92	32,884 00		25,000 00	57,884 00
80	Tipton	8,946 42		2,269 69	11,216 11	21,934 01	1,453 08	19,500 00	42,887 09
81	Union	2,120 89	916 51	806 98	3,844 38	300 00	1,815 00		2,115 00
82	Vanderburgh	5,644 92			5,644 92	25,500 82			25,500 82
83	Vermillion	7,044 05	1,563 29	1,477 32	10,084 66				
84	Vigo	9,564 85	267 61	49,530 98	59,363 44	32,050 19		57,890 00	89,940 19

85	Wabash	7,231 89	1,669 65	. . . . .	8,901 54	16,000 00	. . .	. . . . .	16,000 00
86	Warren	6,645 57	2,007 22	. . . . .	8,652 79	2,535 00	70 00	. . . . .	2,605 00
87	Warrick	5,886 89	2,849 99	. . . . .	8,736 88	1,142 67	761 55	. . . . .	1,904 22
88	Washington	6,018 69	1,692 01	. . . . .	7,710 70	1,313 00	9,515 80	. . . . .	10,828 80
89	Wayne	14,651 85	4,945 54	11,464 83	31,062 22	31,984 93	. . . . .	. . . . .	31,984 93
90	Wells	12,554 32	.	2,316 30	14,870 62	18,150 00	. . . . .	. . . . .	18,150 00
91	White	11,400 17	5,599 28	. . .	16,999 45	5,850 00	7,100 00	. . . . .	12,950 00
92	Whitley	3,336 64	1,710 52	1,330 00	6,377 16	1,088 52			1,088 52
	Total	$713,589 22	$159,155 32	$523,385 19	$1,396,129 73	$847,992 36	$207,527 60	$1,406,930 25	$2,462,450 21

8. BUILDINGS ERECTED.

NUMBER OF SCHOOL HOUSES ERECTED, VALUE OF SCHOOL PROPERTY, ETC., 1900–1901.

Number.	COUNTIES.	Estimated Value of School Houses, including Grounds, Desks, etc.	Estimated Value of School Apparatus.	Total Value of School Property.	Number of School Houses Erected During Year.	Value of Houses Erected.
1	Adams	$178,500 00	$9,900 00	$188,400 00	3	$5,400 00
2	Allen	720,350 00	21,345 00	741,695 00	5	27,121 80
3	Bartholomew	235,800 00	10,675 00	246,475 00	1	6,500 00
4	Benton	141,788 00	13,050 00	154,838 00	2	6,200 00
5	Blackford	132,000 00	3,600 00	135,600 00	1	436 00
6	Boone	230,925 00	10,860 00	241,785 00	3	4,378 00
7	Brown	25,490 00	2 065 00	27,555 00	2	825 00
8	Carroll	188,125 00	8,827 00	196,952 00	1	15,000 00
9	Cass	357,300 00	7,625 00	364,925 00	2	4,225 00
10	Clark	190,200 00	8,075 00	198,275 00	1	547 00
11	Clay	215,955 00	9,100 00	225,055 00	. . . .	. . . . .
12	Clinton	257,400 00	19,600 00	277,000 00	. . . .	. . . . .
13	Crawford	39,620 00	3,220 00	42,840 00	4	2,842 00
14	Daviess	246,000 00	8,145 00	254,145 00	4	17,315 00
15	Dearborn	117,275 00	9,835 00	127.110 00	1	1,722 00
16	Decatur	168,000 00	11,005 00	179,005 00	. . . .	. . . . .
17	Dekalb	227,300 00	11,350 00	238,650 00	1	6,500 00
18	Delaware	375,150 00	11,015 00	386,165 00	1	34,000 00
19	Dubois	81,155 00	6,100 00	87,255 00	2	1,150 00
20	Elkhart	564,100 00	25,350 00	589,450 00	. . . .	. . . . .
21	Fayette	109,300 00	2,875 00	112,175 00	. . .	. . . . .
22	Floyd	245,852 00	6,105 00	251,957 00	1	1,243 00
23	Fountain	198,550 00	13,150 00	211,700 00	. . .	. . . . .
24	Franklin	89,200 00	9,650 00	98,850 00	1	300 00
25	Fulton	180,800 00	11,045 00	191,845 00	. . .	. . . . .
26	Gibson	241,150 00	14,760 00	255,910 00	2	587 00
27	Grant	549,700 00	19,250 00	568,950 00	4	25,300 00
28	Greene	134,070 00	6,045 00	140,115 00	4	2,866 00
29	Hamilton	269,300 00	12,400 00	281,700 00	4	7,500 00
30	Hancock	234,565 00	5,380 00	239,945 00	2	7,800 00
31	Harrison	88,923 00	6,251 00	95,174 00	4	2,550 00
32	Hendricks	237,276 00	11,000 00	248,276 00	2	7,389 00
33	Henry	295,850 00	7,925 00	303,775 00	2	11,900 00
34	Howard	273,426 00	6,240 00	279,666 00	2	2,500 00
35	Huntington	347,700 00	13,575 00	361,275 00	. . .	. . . . .
36	Jackson	186,609 00	7,035 00	193,644 00	6	12,201 70
37	Jasper	104,300 00	10,725 00	115,025 00	5	3,100 00
38	Jay	232,300 00	11,300 00	243,300 00	2	4,200 00
39	Jefferson	81,500 00	6,700 00	88,200 00	1	464 00
40	Jennings	59,900 00	4,175 00	64,075 00	1	2,110 00
41	Johnson	172,000 00	7,386 75	179,386 75	. . .	. . . . .
42	Knox	273,300 00	12,700 00	286,000 00	6	18,200 00
43	Kosciusko	253,350 00	13,585 00	266,935 00	. . .	. . . . .
44	Lagrange	175,700 00	8,891 00	184,591 00	4	13,000 00
45	Lake	450,600 00	18,400 00	469,000 00	5	44,731 00
46	Laporte	354,900 00	16,000 00	370,900 00	1	4,500 00
47	Lawrence	120,700 00	6,275 00	126,975 00	1	2,000 00
48	Madison	723,295 00	25,475 00	748,770 00	4	19,058 40

NUMBER OF SCHOOL HOUSES ERECTED, VALUE OF SCHOOL PROPERTY, ETC., 1900–1901—Continued.

Number.	COUNTIES.	Estimated Value of School Houses, including Grounds, Desks, etc.	Estimated Value of School Apparatus.	Total Value of School Property.	Number of School Houses Erected During Year.	Value of Houses Erected.
49	Marion	$2,907,533 00	$261,496 00	$3,169,029 00	3	$27,680 00
50	Marshall	220,709 00	12,700 00	233,400 00	1	2,500 00
51	Martin	55,600 00	2,950 00	58,550 00	1	450 00
52	Miami	315,100 00	22,500 00	337,600 00	4	29,849 00
53	Monroe	133,700 00	8,025 00	141,725 00	. . .	. . . . .
54	Montgomery	306,295 00	16,225 00	322,520 00	4	9,525 50
55	Morgan	132.125 00	5,300 00	137,425 00	4	28,200 00
56	Newton	95,400 00	4,860 00	100,260 00	. . .	. . . . .
57	Noble	197,800 00	10,550 00	208,350 00	3	22,500 00
58	Ohio	33,750 00	1,600 00	35,350 00	. . .	. . . . .
59	Orange	58,200 00	3,460 00	61,660 00	1	300 00
60	Owens	64,796 00	3,957 00	68,753 00	. . .	. . . . .
61	Parke	134,665 00	12,211 00	146,876 00	3	6,730 00
62	Perry	74,900 00	7,390 00	82,290 00	2	730 00
63	Pike	68,300 00	3,175 00	71,475 00	4	5,350 00
64	Porter	259,750 00	20,430 00	280,180 00	1	2,900 00
65	Posey	174,800 00	12,925 00	187,725 00	3	3,808 00
66	Pulaski	106,085 00	4,050 00	110,135 00	3	1,583 40
67	Putnam	132,700 00	7,800 00	140,500 00	1	625 00
68	Randolph	249,750 00	19,295 00	269,045 00	1	1,750 00
69	Ripley	104,250 00	6,905 00	111,155 00	2	5,750 00
70	Rush	200,200 00	5,950 00	206,150 00	1	1,080 00
71	Scott	49,000 00	3,600 00	52,600 00	1	873 35
72	Shelby	279,500 00	4,700 00	284,200 00	3	5,169 00
73	Spencer	111,400 00	3,645 00	115,045 00	1	5,000 00
74	Starke	98,050 00	7,750 00	105,800 00	1	8,900 00
75	St. Joseph	467,000 00	16,090 00	483,090 00	1	1,500 00
76	Steuben	155,950 00	10,090 00	166,040 00	1	1,000 00
77	Sullivan	173,120 00	5,725 00	178,845 00	3	9,000 00
78	Switzerland	52,760 00	3,350 00	56,110 00	. . .	. . . . .
79	Tippecanoe	494,950 00	31,781 00	526,731 00	3	58,200 00
80	Tipton	132,442 00	5,070 00	137,512 00	2	4,700 00
81	Union	101,650 00	3,925 00	105,575 00	. . .	. . . . .
82	Vanderburgh	880,660 00	20,975 00	901,635 00	3	3,600 00
83	Vermillion	119,575 00	6,495 00	126,070 00	. . .	. . . . .
84	Vigo	621,522 00	22,813 00	644,335 00	6	19,350 00
85	Wabash	331,000 00	11,650 00	342,650 00	2	13,000 00
86	Warren	74,850 00	5,625 00	80,475 00	3	4,000 00
87	Warrick	122,950 00	9,150 00	132,100 00	. . .	. . . . .
88	Washington	88,385 00	4,540 00	92,925 00	5	30,400 00
89	Wayne	530,840 00	20,900 00	551,740 00	3	22,588 00
90	Wells	241,100 00	5,250 00	246,350 00	1	2,700 00
91	White	223,325 00	7,950 00	231,275 00	3	2,788 50
92	Whitley	177,700 00	4,140 00	181,840 00	1	1,000 00
	Total	$21,669,027 00	$1,131,228 75	$22,800,255 75	183	$672,741 65

9. LENGTH OF SCHOOL TERM.

AVERAGE LENGTH OF SCHOOL IN DAYS, 1901.

Number.	COUNTIES.	In Townships.	In Towns.	In Cities.	In Counties.
1	Adams	127	165	180	135
2	Allen	150	170	200	154
3	Bartholomew	140	140	180	143
4	Benton	149	170	. . .	156
5	Blackford	146	.	180	141
6	Boone	125	160	160	132
7	Brown	120	120	. .	120
8	Carroll	128	162	180	136
9	Cass	128	140	180	133
10	Clark	128	162	168	139
11	Clay	134	143	180	139
12	Clinton	132	148	180	139
13	Crawford	120	135	. . .	124
14	Daviess	123	154	180	134
15	Dearborn	132	162	180	145
16	Decatur	148	133	180	148
17	Dekalb	139	170	180	150
18	Delaware	143	170	180	149
19	Dubois	125	163	174	134
20	Elkhart	145	161	180	151
21	Fayette	133	140	180	138
22	Floyd	130	122	180	133
23	Fountain	125	. . .	162	133
24	Franklin	140	170	. . . .	143
25	Fulton	130	170	. . .	138
26	Gibson	126	170	173	135
27	Grant	147	164	180	147
28	Greene	120	155	160	123
29	Hamilton	132	157	160	139
30	Hancock	124	145	175	132
31	Harrison	124	139	. . .	130
32	Hendricks	127	160	. . . .	132
33	Henry	134	148	.	138
34	Howard	131	160	180	138
35	Huntington	128	148	180	136
36	Jackson	124	140	176	130
37	Jasper	135	170	180	142
38	Jay	126	158	180	137
39	Jefferson	120	131	180	127
40	Jennings	125	160	180	132
41	Johnson	132	170	180	142
42	Knox	133	. . .	200	139
43	Kosciusko	148	151	180	146
44	Lagrange	147	160	160	133
45	Lake	193	187	195	176
46	Laporte	171	160	185	172
47	Lawrence	127	180	180	136
48	Madison	142	157	180	157

AVERAGE LENGTH OF SCHOOL IN DAYS, 1901—Continued.

Number.	COUNTIES.	In Townships.	In Towns.	In Cities.	In Counties.
49	Marion	151	160	200	156
50	Marshall	136	165	177	146
51	Martin	117	148	...	123
52	Miami	130	131	180	133
53	Monroe	123	120	180	127
54	Montgomery	133	153	180	140
55	Morgan	127	160	180	132
56	Newton	146	163	..	150
57	Noble	144	180	180	153
58	Ohio	125	...	160	132
59	Orange	120	165	....	126
60	Owen	117	160	.....	122
61	Parke	135	153	.	138
62	Perry	119	149	175	133
63	Pike	115	154	...	122
64	Porter	178	180	180	178
65	Posey	141	170	180	147
66	Pulaski	127	161	...	134
67	Putnam	124	143	175	131
68	Randolph	129	158	175	140
69	Ripley	123	153	..	132
70	Rush	136	160	180	141
71	Scott	123	160	...	129
72	Shelby	129	140	174	133
73	Spencer	121	153	.....	134
74	Starke	136	167	...	144
75	St. Joseph	158	167	180	162
76	Steuben	160	170	....	163
77	Sullivan	134	157		142
78	Switzerland	114	125	160	122
79	Tippecanoe	139	180	190	145
80	Tipton	127	160	170	136
81	Union	155	180	180	161
82	Vanderburgh	154	..	200	159
83	Vermillion	142	172	180	156
84	Vigo	132	160	190	139
85	Wabash	133	170	185	146
86	Warren	129	146	....	132
87	Warrick	119	161	.....	126
88	Washington	120	135	.....	125
89	Wayne	140	164	190	148
90	Wells	136	.....	182	140
91	White	131	156	...	146
92	Whitley	152	165	180	161
	Total	133	145	179	140

LIBRARIES AND READING CIRCLES, 1900–1901.

Number.	COUNTIES.	Town and City Libraries.				Township Libraries.				Young People's Reading Circle Libraries.			
		Number of Volumes in Township, Town and City Libraries.	Number of Volumes Added During Year.	Total.	Volumes Read During Year.	Number of Volumes in Library.	Number of Volumes Added.	Total.	Number of Volumes Read.	Number of Volumes in Libraries.	Number of Volumes Added.	Total.	Number Members Young People's Reading Circle.
1	Adams	2,586	337	2,923	. . .	. . .	. . .	. . .	. . .	6,290	1,094	7,384	3,865
2	Allen	13,122	1,487	14,609	49,390	400	300	700	480	4,387	1,171	5,561	1,377
3	Bartholomew	4,520	914	5,434	24,150	990	. . . .	990	33	2,490	251	2,741	1,455
4	Benton	1,186	70	1,256	452	1,170	8	1,178	93	3,250	404	3,654	788
5	Blackford	2,321	460	2,781	. . .	250	32	282	. . .	1,487	414	1,901	1,269
6	Boone	1,275	120	1,395	400	621	. . . .	621	28	1,040	100	1,140	867
7	Brown	. . .	. . .	. . .	. . .	523	1	524	10	*	*	*	*
8	Carroll	2,827	345	3,172	430	5,370	651	6,021	6,484	4,321	614	4,935	1,301
9	Cass	3,500	500	4,000	30,000	1,634	34	1,668	197	3,152	716	3,868	2,005
10	Clark	6,678	488	7,166	16,385	5,085	267	5,352	11,295	3,695	287	3 982	4,450
11	Clay	24,318	103	24,421	16,391	502	6	508	148	2,367	775	3,142	4,417
12	Clinton	2,500	150	2,650	5,000	1,822	83	1,905	2,527	2,945	260	3,205	636
13	Crawford	361	30	391	476	942	3	945	31	1,495	333	1,828	1,690
14	Daviess	2,145	75	2,220	8,505	200	. . .	200	. .	3,077	468	3,545	1,390
15	Dearborn	2,342	. . . .	2,342	1,123	4,210	. . . .	4,210	2,045	245	42	287	485
16	Decatur	550	45	595	1,967	1,627	. . . .	1,627	46	7,083	1,150	8,233	2,287
17	Dekalb	2,395	30	2,425	1,547	1,047	. . .	1,047	. . . .	302	102	404	117
18	Delaware	13,065	1,075	14,140	23,604	940	370	1,310	. . . .	1,810	284	2,094	1,155
19	Dubois	560	10	570	150	2,103	. . . .	2,103	404	1,039	229	1,268	2,596
20	Elkhart	7,037	532	7,569	16,051	. . . .	. . . .	. . . .	. . . .	12,620	2,446	15,066	6,522

*No report.

21	Fayette	1,100		1,100	700	804	17	821	31	2,278	161	2,439	619
22	Floyd	10,944	292	11,236	41,017	2,297		2,297	81	2,372	358	2,730	654
23	Fountain	3,030	100	3,130	2,950	3,180	192	3,372	620	*	*	*	*
24	Franklin					2,102		2,102	62	6,695	789	7,484	2,174
25	Fulton	195		195		189	7	196		3,850	684	4,534	2,125
26	Gibson	229	3	232	31					4,697	867	5,564	2,364
27	Grant	10,064	1,776	11,840	53,900	772	9	781	187	7,000	2,770	9,770	3,315
28	Greene	980	150	1,130	1,900	245	30	275	675	2,888	1,024	3,912	4,394
29	Hamilton	3,295	550	3,845						8,300	930	9,230	4,600
30	Hancock	3,057	420	3,477	11,780	1,593	100	1,693		3,409	722	4,131	1,947
31	Harrison	875	79	954	1,200	2,590		2,590	225	2,233	202	2,435	1,432
32	Hendricks	370	389	759		524	21	545	199	2,353	656	3,009	2,130
33	Henry	4,600	675	5,275	3,564	992		992	10	7,472	601	8,073	3,360
34	Howard	9,555	1,148	10,703	24,900					3,871	501	4,372	1,845
35	Huntington	12,799	814	13,613	42,114	394	6	400	8	10,043	1,157	11,200	3,649
36	Jackson	1,900	300	2,200	675	708	26	734		1,295	350	1,645	1,271
37	Jasper	2,810	136	2,946	1,038					2,933	617	3,550	1,054
38	Jay	1,600	197	1,797	3,872	2,317	926	3,243	3,525	1,613	347	1,960	1,287
39	Jefferson	4,000		4,000		1,940		1,940	48	3,186	596	3,782	3,350
40	Jennings	412		412	300	1,160		1,160		6,536	876	7,412	1,824
41	Johnson	1,775	75	1,850	1,911	484	132	616	420	1,408	48	1,456	730
42	Knox	5,000	215	5,215	18,689					4,775	250	5,025	4,667
43	Kosciusko	5,060	470	5,530	702	800	200	1,000	528	5,823	1,744	7,567	1,605
44	Lagrange	130	35	165		2,104	102	2,206	98	1,678	490	2,168	1,606
45	Lake	4,342	215	4,557	2,900	1,436	63	1,499	557	4,260	567	4,827	4,807
46	Laporte	15,315	1,748	17,093	68,676	2,108		2,108		13,725	1,140	14,865	2,329
47	Lawrence	60	10	70	137	869		869		460	100	560	475
48	Madison	13,525	1,004	14,529	58,591	2,002	267	2,269	1,856	7,700	712	8,412	3,201
49	Marion	92,574	4,605	97,179	277,145	2,248	41	2,289	1,420	2,895	325	3,220	1,732
50	Marshall	9,369	11	9,380	6,413	2,800	250	3,050	2,675	12,980		12,980	
51	Martin	200	95	295		122		122		270	61	331	30
52	Miami	3,594	498	4,092	18,618	504	72	576	78	1,598	238	1,836	652
53	Monroe	2,651	65	2,716	3,175	1,201		1,201	70	275		275	
54	Montgomery	3,999	833	4,832	3,064	1,852	187	2,039	320	1,549	212	1,761	522
55	Morgan	2,132	92	2,224	860	943		943	77	4,417	75	4,492	2,348
56	Newton. (No report)												

*No report.

LIBRARIES AND READING CIRCLES, 1900-1901—Continued.

Number.	COUNTIES.	Town and City Libraries.				Township Libraries.				Young People's Reading Circle Libraries.			
		Number of Volumes in Township, Town and City Libraries.	Number of Volumes Added During Year.	Total.	Volumes Read During Year.	Number of Volumes in Library.	Number of Volumes Added.	Total.	Number of Volumes Read.	Number of Volumes in Libraries.	Number of Volumes Added.	Total.	Number Members Young People's Reading Circle.
57	Noble	3,382	425	3,807	5,714	. . .	. . . .	. . .	. . . .	2,756	608	3,364	583
58	Ohio	979	25	1,004	. . . .	650	7	657	10	604	115	719	730
59	Orange	25	16	41	. . .	. . .	. . .	. . .	. .	465	190	655	445
60	Owen	*	*	*	*	*	*	*	*	50	. . . .	50	. . .
61	Parke	1,290	100	1,390	2,003	1,296	. . . .	1,296	32	6,146	1,055	7,201	1,839
62	Perry	1,212	196	1,408	. .	. . .	. . . .	. .	. .	6,000	765	6,775	15,000
63	Pike	493	. . .	493	1,000	475	. . .	475	. .	598	104	702	651
64	Porter	3,124	520	3,644	1,400	4,521	964	5,485	3,957	3,613	698	4,311	2,136
65	Posey	19,760	1,615	21,375	11,620	3,672	. . .	3,672	350	6,300	2,493	8,793	2,567
66	Pulaski	583	225	808	800	179	15	194	15	4,045	598	4,643	802
67	Putnam	7,534	341	7,875	21,624	200	38	238	235	358	51	409	500
68	Randolph	3,293	194	3,487	1,520	1,338	. . . .	1,338	65	4,322	17	4,339	. . .
69	Ripley	705	30	755	633	1,976	3	1,979	119	5,125	977	6,102	2,567
70	Rush	2,740	154	2,900	5,632	4,103	397	4,500	6,310	256	146	402	545
71	Scott	125	. . .	125	100	. . .	*	*	*	*	*	*	*
72	Shelby	4,657	825	5,482	18,238	774	64	838	. . . .	136	36	172	109
73	Spencer	1,493	122	1,615	983	614	. . . .	614	. . .	892	112	1,004	490
74	Starke	425	25	450	1,305	845	5	860	31	4,366	339	4,705	1,394
75	St. Joseph	14,743	1,108	15,851	35,864	8,768	976	9,744	130	4,020	299	4,319	926
76	Steuben	703	25	728	1,085	2,013	. . . .	2,013	1,260	3,118	587	3,705	2,079
77	Sullivan	537	77	614	. .	231	154	385	260	3,576	985	4,561	3,049
78	Switzerland	565	35	600	100	. . . .	. . . . .	. . . .	. . .	360	122	482	500
79	Tippecanoe	18,283	1,217	19,500	81,300	. .	. . . . .	. .	. . .	8,288	946	9,234	1,794
80	Tipton	1,245	175	1,420	245	1,035	. . . .	1,035	200	1,612	258	1,870	534

*No report.

81	Union	725	100	825	2,540	1,269	. . . .	1,269	20	1,862	285	2,147	901
82	Vanderburgh	28,000	800	28,800	6,800	2,689	. . . .	2,689	150	730	390	1,120	315
83	Vermillion	. .	. .	. .	. .	. .	. . . .	. .	. . . .	950	100	1,050	935
84	Vigo	18,275	1,275	19,550	64,103	210	. . . .	210	. . . .	4,097	1,483	5,580	1,996
85	Wabash	3,337	. . . .	3,337	31,281	. . . .	. . . .	. . . .	. . . .	9,170	812	9,982	2.286
86	Warren	750	. . . .	750	400	. .	. .	. .	. . .	2,608	462	3,070	1,350
87	Warrick	600	100	700	600	754	10	764	748	3,698	433	4.131	1,047
88	Washington	527	57	584	436	1,474	. . . .	1,474	192	2,516	250	2,766	520
89	Wayne	60,877	11,281	72,158	56,661	29,557	10,250	39,807	52,422	7,277	734	8,011	1,699
90	Wells	3,058	50	3,108	18,531	1,462		1,462	.	1,796	383	2,179	1,134
91	White	740	35	775		77	2	79	. . .	261	571	832	39
92	Whitley	5,280	249	5,529	4,352	.	. .	. . . .		5,676	1,169	6,845	2,482
	Total	534,930	35,188	570,118	1,224,713	140,899	17,288	158,187	94,097	317,579	49,886	367,465	160,485

NUMBER TOWNSHIP INSTITUTES, AMOUNT PAID TEACHERS FOR ATTENDING SAME, AND AMOUNT PAID TOWNSHIP TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1900–1901.

Number.	COUNTIES.	a. Township Institutes.		b. Amount Paid Trustees as Above.					
		Number of Institutes Held.	Amount Paid Teachers for Attending Institutes.	For Employing Teachers.	For Attending Institutes.	For Handling Text-books.	For Making Book Reports.	For Other Services.	Total.
1	Adams	74	$1,115 39	$28 00	$72 00	$45 00	$60 00	$93 00	$298 00
2	Allen	140	2,309 26	124 00	163 00	91 00	148 00	538 00	1,064 00
3	Bartholomew	97	1,366 56	117 00	149 00	70 00	86 00	650 00	1,072 00
4	Benton	82	1,495 25	144 00	128 00	94 65	80 00	620 85	1,067 50
5	Blackford	29	746 78	*	*	*	*	*	*
6	Boone	84	1,861 29	52 00	94 00	127 00	86 00	598 00	957 00
7	Brown	29	645 10	46 00	32 00	75 00	42 00	82 00	277 00
8	Carroll	81	1,986 00	255 00	126 00	190 00	122 00	636 00	1,329 00
9	Cass	88	1,642 05	40 00	200 00	250 00	150 00	. . .	640 00
10	Clark	79	1,480 07	130 00	126 00	70 00	54 00	176 00	556 00
11	Clay	73	1,640 00	104 00	62 00	62 00	30 00	481 00	739 00
12	Clinton	93	2,035 00	208 00	158 00	76 00	80 00	660 00	1,182 00
13	Crawford	59	694 00	20 00	62 00	45 00	72 00	375 00	574 00
14	Daviess	62	1,616 61	107 00	93 00	53 00	106 00	978 00	1,337 00
15	Dearborn	73	1,061 40	69 00	55 90	64 43	53 00	68 00	309 43
16	Decatur	66	1,670 10	203 00	93 00	55 00	64 00	771 00	1,186 00
17	Dekalb	101	1,309 11	86 00	145 00	65 63	58 00	326 00	680 63
18	Delaware	86	2,657 05	118 06	184 00	. . .	100 00	788 00	1,190 00
19	Dubois	39	529 48	6 00	4 00	59 00	22 00	142 00	233 00
20	Elkhart	117	1,862 00	171 00	234 00	91 00	26 00	423 00	945 00

*No report.

21	Fayette	27	700 90	146 00	90 00	105 00	69 00	523 50	933 50
22	Floyd	33	584 35	136 00	66 00	209 00	40 00	283 00	734 00
23	Fountain	72	1,566 30	205 00	125 00	198 00	62 00	. . . . .	590 00
24	Franklin	85	1,221 70	40 00	102 00	60 00	96 00	411 75	709 75
25	Fulton	54	1,343 14	146 00	93 00	92 00	76 00	286 00	693 00
26	Gibson	62	2,406 84	84 00	112 00	132 00	74 00	280 00	682 00
27	Grant	92	2,044 94	105 00	134 00	44 00	68 00	558 00	909 00
28	Greene	95	1,694 92	160 00	152 00	67 00	98 00	376 90	853 90
29	Hamilton	58	2,025 00	90 00	90 00	40 00	64 00	. . . .	284 00
30	Hancock	55	1,453 60	133 00	124 00	112 00	102 00	227 00	698 00
31	Harrison	88	1,704 25	32 00	124 00	68 00	94 00	406 00	724 00
32	Hendricks	77	2,129 48	112 00	127 00	111 00	84 00	802 00	1,236 00
33	Henry	84	1,605 64	267 00	154 00	192 00	72 00	635 00	1,320 00
34	Howard	71	1,379 95	40 00	96 00	30 25	50 00	188 00	404 25
35	Huntington	77	1,317 00	37 00	134 00	48 00	72 00	293 00	584 00
36	Jackson	73	1,603 98	153 00	96 00	168 00	134 00	392 00	943 00
37	Jasper	85	1,400 50	99 00	99 00	60 00	61 00	91 00	410 00
38	Jay	82	1,608 45	52 00	148 00	105 00	70 00	528 00	903 00
39	Jefferson	62	1,114 90	98 00	116 00	50 00	136 00	356 00	756 00
40	Jennings	71	1,145 77	114 00	102 00	199 00	76 00	612 00	1,103 00
41	Johnson	62	1,160 78	67 00	26 00	19 00	24 00	837 00	973 00
42	Knox	66	2,176 00	255 00	130 00	216 00	101 00	727 00	1,429 00
43	Kosciusko	122	1,962 96	66 00	170 00	59 31	60 00	455 00	810 31
44	Lagrange	82	1,409 00	160 00	141 00	60 00	76 00	394 00	831 00
45	Lake	93	2,415 03	†	†	†	†	†	†
46	Laporte	152	1,854 17	143 50	152 00	57 00	100 00	785 50	1,238 00
47	Lawrence	70	1,627 00	64 00	140 00	50 00	80 00	. .	334 00
48	Madison	96	2,584 06	138 00	174 00	61 00	20 00	1,726 00	2,119 00
49	Marion	63	2,690 94	320 00	134 00	179 00	78 00	2,161 00	2,872 00
50	Marshall	73	1,634 33	90 00	122 00	20 00	6 00	571 00	809 00
51	Martin	57	772 55	35 00	42 00	30 00	24 00	144 00	275 00
52	Miami	94	2,693 76	119 00	180 00	65 00	118 00	540 00	1,022 00
53	Monroe	72	975 00	97 00	83 00	41 00	66 00	211 00	498 00
54	Montgomery	70	2,099 89	193 00	135 50	67 00	85 00	473 00	953 50
55	Morgan	95	1,732 86	88 00	124 00	76 00	84 00	218 00	590 00
56	Newton	71	1,054 50	32 00	70 00	29 00	14 50	218 00	363 50

†Trustees paid salary by advisory board.

NUMBER TOWNSHIP INSTITUTES, AMOUNT PAID TEACHERS FOR ATTENDING SAME, AND AMOUNT PAID TOWNSHIP TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1900–1901—Continued.

Number.	COUNTIES.	*a.* Township Institutes.		*b.* Amount Paid Trustees as Above.					
		Number of Institutes Held.	Amount Paid Teachers for Attending Institutes.	For Employing Teachers.	For Attending Institutes.	For Handling Text books.	For Making Book Reports.	For Other Services.	Total.
57	Noble	87	$1,422 09	$79 50	$119 00	$60 00	$59 00	$166 00	$483 50
58	Ohio	27	302 40	20 00	6 00	30 00	32 00	34 00	122 00
59	Orange	68	1,036 86	83 00	115 00	45 00	77 00	289 00	609 00
60	Owen	74	1,176 00	54 00	110 00	61 00	56 00	335 00	616 00
61	Parke	89	2,070 00	229 00	146 00	93 00	116 00	912 00	1,496 00
62	Perry	41	980 00	28 00	42 00	95 00	112 00	. . . . .	277 00
63	Pike	36	989 10	44 00	36 00	119 00	72 00	460 00	731 00
64	Porter	108	1,834 72	90 00	188 00	48 00	30 00	624 00	980 00
65	Posey	68	1,738 25	194 00	105 00	39 00	. . . . .	96 00	434 00
66	Pulaski	81	1,271 25	31 30	73 00	172 00	85 00	404 00	765 30
67	Putnam	91	1,600 77	14 00	102 00	55 00	62 00	1,277 00	1,510 00
68	Randolph	74	1,813 20	129 00	138 00	38 00	151 00	637 00	1,103 00
69	Ripley	78	1,263 55	243 00	82 00	248 00	107 00	303 00	983 00
70	Rush	93	1,857 34	138 00	110 00	143 00	94 00	444 00	929 00
71	Scott	30	390 50	86 00	60 00	210 00	80 00	110 00	546 00
72	Shelby	91	2,153 95	254 00	180 00	110 00	98 00	1,029 00	1,671 00
73	Spencer	55	1,323 54	186 00	75 00	58 00	34 00	150 00	503 00
74	Starke	65	1,058 11	14 00	40 00	17 00	23 00	36 00	130 00
75	St. Joseph	103	1,964 14	216 00	176 00	125 00	90 00	301 00	908 00
76	Steuben	54	578 82	84 00	96 00	45 00	88 00	272 00	585 00
77	Sullivan	61	1,860 60	250 00	128 00	123 00	98 00	690 00	1,289 00
78	Switzerland	34	691 75	62 00	42 00	51 00	37 00	129 00	321 00
79	Tippecanoe	87	2,425 65	310 00	66 00	61 00	80 00	1,137 00	1,654 00
80	Tipton	39	1,347 49	24 00	62 00	52 00	40 00	342 00	520 00

81	Union	48	784 99	46 00	48 00	30 00	100 00	554 00	778 00
82	Vanderburgh	53	1,194 62	82 00	88 00	54 00	64 00	512 00	800 00
83	Vermillion	35	1,382 69	83 00	70 00	. . . . .	50 00	. . . . .	203 00
84	Vigo	79	1,503 25	290 00	112 00	. . . . .	. . . . .	2,498 00	2,900 00
85	Wabash	45	2,072 91	360 00	72 00	32 00	17 60	282 00	763 00
86	Warren	76	1,182 00	207 00	116 00	161 00	90 00	305 00	879 00
87	Warrick	59	1,375 79	55 00	68 00	185 70	108 00	622 00	1,038 70
88	Washington	85	1,388 09	30 00	88 00	31 00	54 00	168 00	371 00
89	Wayne	105	1,527 00	206 00	138 00	75 00	90 00	155 00	664 00
90	Wells	60	1,704 85	119 00	80 00	. . .	68 00	326 00	593 00
91	White	43	1,759 85	164 00	105 00	61 00	54 00	462 00	846 00
92	Whitley	72	1,412 00	42 00	60 00	10 00	22 00	155 00	289 00
	Total	6,687	$138,455 06	$10,711 30	$9,639 50	$7,440 97	$6,391 50	$41,331 50	$75,514 77

12. AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1900–1901.

Number.	COUNTIES.	Towns.	Cities.	Total.
1	Adams	$90 00	$266 33	$356 33
2	Allen	90 00	750 00	840 00
3	Bartholomew	244 00	300 00	544 00
4	Benton	227 00		227 00
5	Blackford		300 00	300 00
6	Boone	135 00	140 00	275 00
7	Brown	18 00		18 00
8	Carroll	107 00	120 00	227 00
9	Cass	70 00	450 00	520 00
10	Clark	600 00	300 00	900 00
11	Clay	336 00	225 00	561 00
12	Clinton	220 00	350 00	570 00
13	Crawford	180 00		180 00
14	Daviess	146 00	175 00	321 00
15	Dearborn	192 05	300 00	492 05
16	Decatur	124 15	150 00	274 15
17	Dekalb	270 00	205 00	475 00
18	Delaware		225 00	225 00
19	Dubois	80 41	137 95	218 36
20	Elkhart	153 00	600 00	153 00
21	Fayette	49 00	150 00	199 00
22	Floyd	81 00	450 00	531 00
23	Fountain		390 00	390 00
24	Franklin	133 00		133 00
25	Fulton	375 00		375 00
26	Gibson	75 00	475 00	550 00
27	Grant	450 00	750 00	1,200 00
28	Greene	205 00	88 25	293 25
29	Hamilton	292 50	180 00	472 50
30	Hancock	110 00	120 00	230 00
31	Harrison	149 00		149 00
32	Hendricks	340 00		340 00
33	Henry	594 50		594 50
34	Howard	35 00	175 00	210 00
35	Huntington	237 00	300 00	537 00
36	Jackson	75 00	300 00	375 00
37	Jasper	84 00	75 00	159 00
38	Jay	127 00	225 00	352 00
39	Jefferson	104 00	600 00	704 00
40	Jennings	25 00	45 00	70 00
41	Johnson	61 00	150 00	211 00
42	Knox		250 00	250 00
43	Kosciusko	268 00	249 85	517 85
44	Lagrange	163 00		163 00
45	Lake	535 00	700 00	1,235 00
46	Laporte	80 00	450 00	530 00
47	Lawrence	90 00	240 00	330 00
48	Madison	621 00	577 82	1,198 82

AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1900-1901—Continued.

Number.	COUNTIES.	Towns.	Cities.	Total.
49	Marion	$60 00	$1,000 00	$1,060 00
50	Marshall	121 00	100 50	221 50
51	Martin	173 00		173 00
52	Miami	202 00	75 00	277 00
53	Monroe	58 00	100 00	158 00
54	Montgomery	17 75	325 00	342 75
55	Morgan	105 00	72 00	177 00
56	Newton	175 00		175 00
57	Noble	110 00	210 00	320 00
58	Ohio		120 00	120 00
59	Orange	90 00		90 00
60	Owen	180 00		180 00
61	Parke	260 25		260 25
62	Perry	60 00	240 00	300 00
63	Pike	181 50		181 50
64	Porter		325 00	325 00
65	Posey		400 00	400 00
66	Pulaski		174 50	174 50
67	Putnam	175 00	225 00	400 00
68	Randolph	269 00	250 00	519 00
69	Ripley	141 10		141 10
70	Rush	100 00	225 00	325 00
71	Scott	15 00		15 00
72	Shelby	145 25	396 00	541 25
73	Spencer	764 19		764 19
74	Starke	82 50		82 50
75	St. Joseph	147 65	600 00	747 65
76	Steuben	307 00		307 00
77	Sullivan	143 00		143 00
78	Switzerland	25 00	90 00	115 00
79	Tippecanoe	75 00	450 00	525 00
80	Tipton	30 00	150 00	180 00
81	Union	60 00	75 00	135 00
82	Vanderburgh		1,200 00	1,200 00
83	Vermillion	189 00	25 00	214 00
84	Vigo	36 00	450 00	486 00
85	Wabash	150 00	100 00	250 00
86	Warren	166 00		166 00
87	Warrick	225 00		225 00
88	Washington	182 85		182 85
89	Wayne	340 00	305 06	645 06
90	Wells		275 00	275 00
91	White	145 00		145 00
92	Whitley	69 00	150 00	219 00
	Total	$14,417 65	$20,043 26	$34,460 91

13. STATISTICAL SUMMARIES FOR 1901.

1. THE SCHOOL FUND, 1901.

(a) COMMON SCHOOL FUND.

(1) Additions to Fund, 1901.

*Amount held by counties June, 1900	$7,888,511 92
Added by fines from county clerks June, 1901	12,273 67
Added by fines from justices June, 1901	22,095 45
Added from all other sources June, 1901	2,698 46
Total	$7,925,579 50
Total held by counties June, 1901	$7,925,579 50
Increase in common school fund, 1901	37,067 58

(b) CONGRESSIONAL TOWNSHIP FUND.

(1) Additions to Fund, 1901.

†Amount held by counties June, 1900	$2,465,317 57
Amount since added by sale of land	8 48
Amount since added from other sources	764 57
Total	$2,466,090 62
Amount deducted on account of errors	1,343 79
Total balance held by counties June, 1901	$2,464,746 83

SUMMARY OF SCHOOL FUNDS, 1901.

Common school fund held by counties June, 1901	$7,925,579 50
Congressional township fund held by counties, June, 1901	2,464,746 83
Total fund June, 1901	$10,390,326 33
Net increase to fund during year	36,496 84

1—a. CONDITION OF SCHOOL FUND, 1901.

(a) COMMON SCHOOL FUND.

Amount of fund safely invested	$7,358,658 85
Amount of fund unsafely invested	32,989 83
Amount of fund not invested and in county treasuries drawing interest from the counties	533,930 82
Total	$7,925,579 50

*This does not agree with figures in 1900 report on account of corrections being made after publication of report.

†This does not agree with figures in 1900 report on account of corrections being made after publication of report.

(b) CONGRESSIONAL TOWNSHIP FUND.

Amount of fund safely invested	$2,191,072 67
Amount of fund unsafely invested	14,341 93
Amount of fund not invested and in county treasuries drawing interest from the counties	259,332 23
Total	$2,464,746 83

(c) SUMMARY OF FUNDS INVESTED.

Amount of both funds safely invested	$9,549,731 52
Amount of both funds unsafely invested	47,331 76
Amount of both funds not invested and in county treasuries	793,263 05
Total as in "a" and "b"	$10,390,326 33

2. SCHOOL REVENUES, 1901.

(a) TUITION REVENUE.

Distributed by County Auditors.

In January, 1901—	
Common school revenue	$944,235 41
Congressional township revenue	77,298 76
Local tuition revenue	1,195,087 90
Liquor license revenue	261,495 38
Total distributed	$2,478,117 45
In July, 1901—	
Common school revenue	$1,111,876 47
Congressional township revenue	75,846 51
Local tuition revenue	1,503,100 28
Liquor license revenue	223,586 18
Dog fund revenue	87,873 67
Total distributed	$3,002,283 11
Grand total for year	5,480,400 56

(b) SPECIAL SCHOOL REVENUE, 1901.

Distributed by County Auditors.

In January	$1,128,168 16
In July	1,414,291 85
Total	$2,542,460 01

(c) SUMMARY OF REVENUES, 1901.

Tuition revenue distributed January, 1901	$2,478,117 45
Tuition revenue distributed July, 1901	3,002,283 11
Special school revenue distributed January, 1901	1,128,168 16
Special school revenue distributed July, 1901	1,414,291 85
Grand total	$8,022,860 57

3. ENUMERATION, 1901.

White males	384,265
Colored males	7,646
Total males	391,911
White females	358,189
Colored females	7,584
Total females	365,773
Grand total	757,684
Total number white children	742,454
Total number colored children	15,230
Grand total as above	757,684
Enumeration, 1900	756,004
Increase	1,680

4. ENROLLMENT AND ATTENDANCE, YEAR ENDING JULY 31, 1901.

(a) ENROLLMENT.

White males	278,218
Colored males	5,105
White females	267,960
Colored females	5,448
Total	556,731
Enrollment, 1899-1900	564,807
Decrease	8,076
Total daily attendance	420,276
Attendance last year	429,566
Decrease	9,290

Attendance, 55 per cent. of enumeration.
Attendance, 76 per cent. of enrollment.
Enrollment, 73 per cent. of enumeration.

5. NUMBER SCHOOL HOUSES, 1901.

Stone	93
Brick	4,820
Frame	5,086
Log	4
Total	10,003

6. TEACHERS EMPLOYED, 1900–1901.

Males	7,179
Females	8,800
Total	15,979
Number teachers last year	15,617
Increase	362

7. AVERAGE DAILY WAGES, 1900–1901.

In Townships—	
Males	$2 14
Females	1 94
Average	$2 05
In Towns—	
Males	$3 06
Females	2 07
Average	$2 42
In Cities—	
Males	$4 38
Females	2 34
Average	$2 70

8. VALUE OF SCHOOL PROPERTY, 1901.

Estimated value school houses, grounds, etc.	$21,669,027 00
Estimated value school apparatus	1,131,228 75
Total value	$22,800,255 75
Number school houses erected dduring year	183
Value school houses erected during year	$672,741 65

9. AVERAGE LENGTH OF SCHOOL IN DAYS, 1900–1901.

a. In townships	133
b. In towns	145
c. In cities	179
d. In State at large	140

10. LIBRARIES AND READING CIRCLES.

(a) LIBRARIES.

(1)	In Towns and Cities	53,493
	(a) Number volumes in libraries	534,930
	(b) Number volumes added during year	35,188
	Total	570,118
	(c) Number volumes read during year	1,224,713
(2)	In Townships—	
	(a) Number volumes in libraries	140,899
	(b) Number volumes added during year	17,288
	Total	158,187
	(c) Number volumes read during year	94,097

(b) YOUNG PEOPLE'S READING CIRCLE LIBRARIES.

(1)	Number volumes in libraries	317,579
(2)	Number volumes added during year	49,886
	Total	367,465
(3)	Number members Y. P. R. C.	160,485

11. TOWNSHIP INSTITUTES, SALARIES PAID TRUSTEES FOR MANAGING EDUCATIONAL WORK, ETC.

a.	Number township institutes held during year		6,687
b.	Amount paid teachers for attending institutes		$138,455 06
c.	Amount paid trustees for managing educational work—		
	(1)	Employing teachers	$10,711 30
	(2)	Attending institutes	9,639 50
	(3)	Handling text-books	7,440 97
	(4)	Making school book settlements	6,391 50
	(5)	Other services	41,331 50
		Total	$75,514 77

12. AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1900–1901.

a.	In towns	$14,417 65
b.	In cities	20,043 26
	Total	$34,460 91

13. AMOUNT SALARIES PAID COUNTY SUPERINTENDENTS.

Estimated	$92,000 00

IV. Local School Conditions.

(COUNTY SUPERINTENDENTS' VIEWS.)

LOCAL SCHOOL CONDITIONS.

(Letters from County Superintendents.)

In July, 1902, the county superintendents of the State were asked to write brief statements about the school conditions in their respective counties. The limitations were that the letters should be brief and to the point. Each superintendent was instructed to write about the progress in school matters in his county during the last two years, setting forth the larger movements, methods and accomplishments, and to recommend necessary or desirable policies for the future.

The following letters, constituting the whole of this section of the Biennial Report, are the responses. The chief importance attached to these letters is that their publication will enable each county superintendent to know the policies of the other counties in educational matters. This section (IV), taken as a whole, presents one of the most satisfactory views of Indiana's school system and school problems that it is possible to obtain.

ADAMS COUNTY.

Decatur, Ind., September 3, 1902.

Dear Sir—In reply to your favor relative to school conditions in Adams County, will say that the past year has been harmonious and successful. The school officials and teachers were enthusiastic, and put forth every energy to have our schools rank among the best in the State. Teachers' reports show a decided improvement in attendance and scholarship. The compulsory educational law has been the means of bringing in a large number of boys and girls. But few prosecutions were made. In nearly all cases by simply giving notice to the parent was sufficient.

Our district library has been a potent factor in getting the parents and pupils interested in the schools. We have found from experience that nothing can add more to the usefulness of our schools than good libraries. We have long since learned that the pupils will read something, and why not have them read the best? Many parents read one or more books last year, and in some instances became members of the Y. P. R. C. One difficulty we have to contend with is to keep the older boys and girls in school long enough to complete the prescribed course. While there are many who do complete the work, yet there are others who should, also. We are making special effort to have the work done in a creditable manner. Oftentimes parents, and perhaps a few teachers, become over-anxious, and push the pupils too rapidly, and as a result the pupil is minus in the final examinations and does not become as proficient as he should otherwise.

Since the new wage law became operative, we have been able to secure teachers who are better prepared, from a scholastic point of view, to perform their work, and, as a rule, give better satisfaction to all concerned. While we notice improvement in lines mentioned, we also see improvement in school buildings that are being constructed in various parts of the county. Our trustees are quite progressive in this work, and are building schoolhouses which are more sanitary and better in every respect for the pupils. They are giving more attention to methods of heating, ventilating and seating. The older houses are being papered and improved in many ways.

We are working to secure longer terms, especially in our rural schools. If the city and towns have a longer term than that fixed by law, why should not the rural schools have, also? Our trustees are making a higher local levy for tuition, which will give a longer term, thus enabling our rural pupils to compete favorably with the town and city pupils.

We have adopted a uniform system of reports, including a daily register, which gives uniformity in every school in the county. We find from experience that this system is a great improvement over the old, and is advantageous in many ways.

We are working to cultivate a proper school sentiment among the pupils in the public schools, believing that this has not received the attention that it should have received. We believe every one connected with the public school should be fashioned in the right spirit of thinking, feeling and acting.

In our visitations among the schools in the county, we often find the desks cut or scratched, blackboards defaced, obscene writing and symbols in the outbuildings, and many other indications which mar and destroy the refined sentiment that should prevail. We are trying to have our pupils taught that the school buildings and grounds belong to them in common; therefore, they should not destroy them. They are theirs to enjoy, beautify, preserve, and, later, to transfer to those who come after them.

We are anxious to have our pupils in favor of everything that will benefit our schools and build up our State and Nation.

Yours truly,

IRVIN BRANDYBERRY, County Superintendent.

ALLEN COUNTY.

Fort Wayne, Ind., July 16, 1902.

Dear Sir—The teacher and the child are the essential elements of the school. The child comes to us ready made. We are obliged to accept him for better or worse. We have a limited choice as to the teacher. And one of our most sacred duties is to exercise this choice intelligently and conscientiously. If it were possible to fill all of our schools with teachers having sincerity and ability equal to that of the best among them, they would work a transformation unaided. The central defect in all school work is the limitation of the teacher. We need men and women in our schools who are fitted by nature and culture to command the confidence and respect of their pupils and the people with whom they work. They

should be in touch and in sympathy with their patrons and the entire community. This is practically impossible with boys and girls having limited scholarship and less training. He who creates a sentiment for stronger teachers and produces a condition that will demand them has rendered the greatest possible service to the child.

Loyalty demands an intelligent adherence to adopted plans for the schools of our State. The condition in these schools and our limitations render it necessary to vary at times from strict adherence. The good of the child being the central thought in all school work, order and system must yield to his demands, and the intelligent operation of any plan suggests that classes, grades and courses of study are adjustable to existing conditions. Their value depends largely upon their flexibility. One aim has been to relieve the situation in the overcrowded schools by reducing the grades to five and the daily recitations to twenty or fewer, where possible.

As a means of ascertaining the exact state of the organization and progress of our schools, and the relation that each child bears to them, aside from actual visitations, we rely upon a system of reports, sufficiently comprehensive to show to us and to parents, the organization of each school in the county, how classified, graded and programed, the lines of work pursued by each pupil and his standing in each subject studied; and yet sufficiently simple not to be burdensome to the teacher. These are used by us during the year and handed to the succeeding teacher at the beginning of the next year. We feel that there is as much good comes of our eternal vigilance in the details of our daily task and that of those under our supervision as from the pursuit of great things. It is the painstaking care in small things that begets a habit of diligence in all things that means most to most of us.

We are very glad indeed to note a tendency toward better things. One of the most hopeful conditions is the higher attainment of our teachers each year. More of them are completing their work in some good school. This has led to higher scholarship, a higher standard of teaching, higher grades of license, higher wages and better professional work in every way. A decided improvement has been made in the teaching of music. The plan of having a supervisor of music in charge of one or two corporations, is being tried with success. The work in nature study is pursued more generally and much more intelligently than before. The sentiment in favor of the Young People's Reading Circle books is growing rapidly among pupils and patrons. In fact, nearly all our schools have a library of these and other good books. Our schoolrooms are better kept, better equipped, better decorated and more homelike than ever before.

The number of schools in our county is decreasing every year as a result of closing the small schools. There are many apparent advantages growing out of the centralization of our rural schools. Prominent among these is the social feature, the competition coming from a number of pupils of the same grade that is impossible in the very small school, and the pecuniary advantage seems to be considerable. We have in no instance tested the plan of transporting all the children of a corporation to one central school. Our policy has been to advise the closing of small schools and attaching them to adjoining districts, transporting where necessary. In most of our townships the plan of a central school for all is not feas-

ible. It would result in a large sacrifice of valuable property, heavy outlay for new buildings, overcrowding of the lower grades, with little, if any, economic advantage in the maintenance of the work. Besides, there is an advantages which comes to the pupil in the ungraded school from hearing and observing the work of grades above and below him that is not possible in the graded school. This preview and review is invaluable in fixing the work in the mind of the child. In order to relieve the overcrowded condition of our schools, we are trying, in some of our townships, the plan of bringing all of those pursuing the seventh and eighth years' work into one room, placing them in charge of a teacher specially fitted to do this work. This relieves all the teachers of a very large share of their work, and very much simplifies the transportation problem.

We are maintaining high schools in nearly every quarter of our county remote from our county seat. We believe that it is decidedly better to transfer those prepared for high school work to our city high school than to maintain high schools near the city. In this connection we wish to condemn the principle involved in our present transfer law—transfer for revenue. The price of tuition should never be so high as to be a bar to those desiring to better their school facilities. One of the most valuable parts of our work is that of inducing young people to enter high school, and anything that hinders this is wrong.

One of the most helpful features of our work is the frequent meetings of the County Board of Education, at which every phase of the work is discussed.

In the construction of schoolhouses, we have for several years, in nearly every instance, provided a basement-room under the entire building in which has been placed a furnace, and in connection with this a system of ventilation. There are driven wells in most of our schoolyards or in the basements. Special attention has been given to the sanitary conditions of all buildings recently erected.

Our policy shall be to still pursue the line begun, aiming at constant improvement. Every encouragement shall be given to teachers aiming to become professionally prepared for their work. We shall use every effort to induce our young people to specially fit themselves for life's work through education. As a means to this end we shall strive for a closer union between the home and the school.

F. J. YOUNG, County Superintendent.

BARTHOLOMEW COUNTY.

Columbus, Ind., September 2, 1902.

Dear Sir—In general, the schools of Bartholomew County are in a progressive condition. There is a good educational spirit among the people. Although the enumeration and enrollment have decreased in the last two years, the average attendance has increased, as shown by the following:

	Enumeration.	*Enrollment.*	*Av. Attendance.*
1900	7,152	5,462	4,021
1902	6,925	5,277	4,157

While this increase of attendance over enumeration and enrollment is due in part to the truancy law, I believe that the increased interest in education among the people generally has had its full share in keeping children in school.

The number of male teachers has decreased so that the demand for good male teachers now exceeds the supply. This, I think, is a misfortune, and can be met in one way only—that is, make the compensation and permanency equal to that offered by other kinds of business open to energetic young men.

While the centralization of schools has not been as marked in this county as in some other counties of the State, the sentiment for better school facilities will enable us to gradually do away with the few remaining small and weak schools, to which the people of some communities yet cling. My own sentiment in this matter of centralization is that the neighborhood school is best for the community so long as the schools are large enough to afford reasonably large classes and keep up a fair degree of emulation. Even individual effort has its advantages in the development of self-reliance. The common country school is the only public institutional unit which can claim the united support of all people of of a community. The small school should be abandoned and the children sent to other schools, transportation furnished when necessary.

In the last two years one township graded and high school has been built at a cost of about eight thousand dollars. The county has a uniform two-year high school course of study with a constant increase in attendance and number of graduates. Quite a number of our common school graduates, who live near enough, enter the Columbus City commissioned high school at once; and many of those who complete the two-years town and township high school course are transferred to the commissioned high school at Columbus for the third and fourth years' work.

A considerable improvement has been made in decoration and sanitation. Greater care is taken in selecting wall paper and window shades, both as to harmony of color and needs of the eye. Most of the schools are provided with good drinking water, but in some parts of the county the water supply is not what it should be.

The minimum wage law has been an incentive to better scholarship among the teachers. In the past year there has been a decided increase in the number of manuscripts for teacher's license sent to the State Department for gradation. As many as ninety teachers out of a possible one hundred and sixty will teach in this county the coming school term on a State license. I believe that it would be a good plan to have all teachers licensed by the State Department.

The things to which we are giving special attention at this time are: The consolidation of schools; improvement in the town and township high schools; a library in each schoolhouse in the county, and a higher standard in the teaching force.

We have an efficient and progressive body of school officers, who are doing much to advance the cause of education in this county.

Very respectfully,

JAMES H. CLARK, County Superintendent.

BENTON COUNTY.

Fowler, Ind., September 4, 1902.

Dear Sir—In the past I have been working with teachers, officers, patrons and pupils to strengthen our school spirit, and to further elevate the standard of the schools of Benton County. Teachers have been encouraged to seek special training in their profession, to be students as well as teachers, and to cultivate a spirit of professional emulation. They are growing steadily, and our school officers are showing their appreciation of this growth by advancing teachers' wages and providing better facilities for doing good work in the schoolroom.

The growth of school spirit has been best manifested by the presence of more than six thousand enthusiastic people at our various commencements within the last few months. Patrons have come to fully realize the purposes and benefits of our public schools, and have awakened to the importance of having good teachers, good houses, good sanitary conditions, and good school appliances. The result is an annual addition of nearly fifteen thousand dollars to our investments in school property. Within two years three excellent new buildings, costing respectively four, six, and ten thousand dollars, have been completed by our township trustees, and four others are expecting to build some time during the coming year.

Notwithstanding the fact that our enumeration is declining, improved conditions are increasing the attendance in our schools by keeping the pupils in school more regularly and for a greater number of months. Our common school graduates have increased 64 per cent., our high school enrollment 55 per cent., and our high school graduates 66 per cent. Two years ago eleven high school teachers were employed in our county; it now requires twenty to do the work.

Public sentiment in this county is not very favorable to centralization. Our school officers favor it, but feel that they ought to be governed by the wishes of their constituents. A few schools are closed each year, but a few others are opened in other localities, so that the number of schools remains about the same.

In the future I shall labor to bring the schools of Benton County up to a still higher standard. To do this I will carefully consider the best means for aiding our school officers in all matters in which they seek my aid; I will try to keep our patrons in close touch with our schools by listening carefully to all their complaints, and by leading them to see how much their co-operation and consideration may aid and encourage officers, teachers and pupils; I will try to help our teachers raise our standard of teaching and character still higher; I will try to let all our boys and girls see that I want to aid them, that I am their friend, as well as their superintendent, and that the one question which is ever in my mind is: What can I do to help them? If I can succeed in all of these things, then I can get our school officers, teachers, patrons and pupils to sing together the "grand, sweet song,"

"Go on, go on, go on, go on, go on, go on, go on,"

and schoolhouse construction, school sanitation, school attendance and school teaching will all move onward and upward. Then our boys and girls, with renewed spirits, would continue to sing,

Country homes of plenty, and our city homes so fair,
Church and school our fathers built with honest, loving care,
All shall ring with happy sons of children bright and fair;
Yes, we are proud of old Benton.

Hurrah, hurrah, for Benton we will cheer!
Hurrah, hurrah, for Benton ever dear,
A song of tribute we will sing, sing it far and near;
Yes, we are proud of old Benton.

Fraternally yours,
L. A. McKNIGHT, County Superintendent.

BLACKFORD COUNTY.

Hartford City, Ind., July 11, 1902.

Dear Sir—The schools of Blackford County have made all progress in the last two years that could be desired, except as to a few particulars. The truancy law has been well enforced and has very materially increased the attendance. I am sorry to see so few of our eighth year graduates take the high school work. Those that desire to become teachers return to school to take the "common branches" over and over until they make a grade for a teacher's certificate. I believe some high school work should be required as a part of a beginning teacher's qualifications.

We have six or seven schools in this county that are too small for good work to be done. We have two small schools close together. One of those schoolhouses became unfit for use. It became necessary to abandon it, and send the pupils to the other school or to build another schoolhouse. The trustees desired to abandon the school and to transport the pupils to the other small school, but the patrons, though but few of them, refused to allow it abandoned, but insisted upon a new building, which they have secured at a cost of about $1,500 for the township, besides the extra annual expense. We will have another case of like nature in a year or two more, when another schoolhouse must be abandoned, as it should be, or be rebuilt. I hope when that time comes the interest of the whole township will be better protected by law.

Yours very truly,
FINLEY GEIGER, County Superintendent.

BOONE COUNTY.

Lebanon, Ind., July 22, 1902.

Dear Sir—I have given my time almost solely to efforts for better school government and more efficient instruction of pupils. The centralization of schools and better sanitary methods have been urged only as part of the necessary conditions to the better development of our ideals along these lines. While the efforts, in a general way, have not all been wasted, but little improvement can be seen in the conditions mentioned. The agitation of the subject of school consolidation has, however, met with marked encouragement among the intelligent rural patrons; and if it were not for the cumbrous machinery of our school laws—made more unwieldy by recent legislation—the work of reorganizing our schools upon a higher plane would be now well under way. I have, however, while urg-

ing these changes, not failed to keep in mind the fact that the most favorable material surrounding will add nothing to schools that lack the vital element—conscientious and well equipped teachers. There are evidences within call of every school official that the very best external conditions may be accompanied by a minimum of moral or mental culture, that superior physical and æsthetical surroundings occasionally emphasize the paucity of healthful instruction. The debauching tendency of such schools may be augmented by the unwise laudations of superficial school men, who mistake material display for mental growth, and so inflate the minds of pupils and lull the criticisms of parents that sometimes very defective schools may be held up as examples of exalted school virtues.

There can be then no sure advancement except through increased ability of the teaching force, or such close and forceful supervision that the latent power and unapplied resources of the teachers shall be utilized. Everybody probably agrees to the above statement; but we are generally content to rely upon our school system to work out the desired results. Perhaps in the ages to come it may cure the defects; but it seems to me that there are simple remedies that should be applied now. Could it not be demanded now that no one should hereafter enter the profession of teaching without at least four years of academic work, with at least six months in a practical training school, wherein actual experience, and not psychological lectures, was the rule? Then, having made a little progress in qualification, let us get rid of the divided authority in school matters. Now the State Board of Education, the county superintendent, the township trustee, or town and city boards, are jointly responsible for the employment of teachers, with the usual result of divided responsibility. The township trustee, with multitudinous other duties, is the final authority in the employment. He need not necessarily have any qualifications for selecting educators. He may be wholly uninterested or indifferent in the matter of education, yet to him is given the weightiest duty of all. What wonder if while in the most whimsical manner he perfunctorily performs the duties of his office, his conscience is soothed by the thought that other officials share with him the responsibility for the miserable results. The higher officials send out poorly qualified candidates or proven failures, from whom he must make his selections with the hypercritical thought that the trustee is responsible for the employment, anyway.

The county superintendent, while nominally a school official, is, in his official duties, as laid down by law, quite as much a clerk of some publishing houses. He does a vast deal of clerical work for $4 a day, which quite as good clerks as he would be glad to do for $2, while he is forced to leave undone things of vital interest to the schools for want of time or lack of authority. A properly qualified superintendent, assisted by a board of some clerical ability, could do all the business now done in his office and all the school business done by the trustees of the county with much less cost in money for the same service, much less wasted energy and with an opportunity to be ten-fold more effective than under the present system. Then if the State authorities fixed the standard and issued the licenses, and schoolbook companies dispensed their own books, some of the hopes of ardent school men might be realized in the twentieth century.

Very truly,

R. H. HARNEY, County Superintendent.

BROWN COUNTY.

Nashville, Ind., September 2, 1902.

Dear Sir—Yours of August 25 received. Will say in reply that in the past two years we have made some changes in our school work, which we hope will prove beneficial to our schools. Indeed, we feel we are already reaping some of the benefits now.

In regard to the Truancy Law:

1. The law enacted by the last General Assembly was the first real compulsory educational law we have had, and we tried to enforce this law, which increased the attendance 8 per cent. We succeeded in getting almost three hundred more pupils in the schools of the county than had been in school since my election. Therefore, I heartily endorse the present educational law.

2. We have steadfastly worked to have vocal music taught in the schools for the past three years, and at the March meeting of the Board of Education, the following resolution was passed unanimously: "That the teachers be, and are required, to the take the examination in the subject of vocal music on and after January, 1903, and that vocal music shall be taught in the public schools of this, Brown County." So we expect to see results from this movement in the near future.

3. By visiting and spending at least one-half day in every school in the county at least once during the school term, and by personally inspecting the work of the schools, as well as that of the teacher, I find very many places where a suggestion or a little help is quite a benefit to the teacher and school. And by these visits, with the help and encouragement which I have tried to give both teachers and pupils, I feel justified in saying the schools of the county are on a higher plane than they were a few years ago, as well as the personnel of the teachers.

4. By making the examinations a little more rigid, we hope to raise the scholarship of our teachers. I believe the State Board questions are now difficult enough, but every year I require my teachers to be a little more exact in their answers to the questions.

5. By reason of a lack of funds, which we can not help, this county, with a few other counties in the State, can not have the required six months' term of school. I would suggest that you ask the next General Assembly of the State to increase the State levy from 11 to 13 cents on the $100, or enough to at least let every county in the State have a six months' term of school, without making the local levy more than 35 cents on the $100, which is the limit of local school tax. The State constitution says: "Taxation shall be apportioned equal throughout the State." But it does not say disbursements shall be equal.

Therefore, I would suggest a raise in the State levy of 2 cents, and the additional funds collected by reason of this 2 cent levy, be apportioned, or such portion of it as is necessary, among those counties which can not at present have a six months' term of school, and the remainder, if there be a remainder, apportioned equally throughout the State.

I believe this is right, because the State of Indiana can not afford to rear children in ignorance because they live in a poor locality.

Respectfully submitted,

A. A. MANUAL, County Superintendent.

CARROLL COUNTY.

Delphi, Ind., September 1, 1902.

Dear Sir—From the 160 teachers who work in the schools of Carroll County, sixty-nine are in the towns and ninety-one are in the districts. In these town schools the management has been placed almost entirely in the hands of the principals, thus leaving the time of the county superintendent to the country school. These country schools, which have an enrollment ranging from five to fifty, have been graded in harmony with the State course of study, until nearly all the pupils are very regular and this has been the means, primarily, of securing very good discipline. Very great effort has been made to secure better trained teachers in the country schools, and in 1901-2 80 per cent. of them had had training of from one term to two years.

The number of schoolhouses in the country is much too great for the number of children. Very great effort has been made to consolidate by uniting small schools and by transporting children into the towns, but the movement does not meet with marked success, because of its unpopularity. Twelve schools have thus been abandoned, and the pupils of four transported at public expense. In these districts satisfaction prevails.

This county is supporting five high schools of a four years' course well established; three of a three years' course, and five of a two years' course. The work has been made uniform throughout the county, and persons are given credit in one school for work done in another. These schools have been so well established that each year they enroll about three hundred students and graduate about fifty. Much apparatus and many working libraries are yet needed, and the work of securing the necessary funds is well under way.

The County Board of Education furnishes each district as much money as it will raise, and in the past five years each country school has collected quite a nice library, the books of which are very widely read.

A course of instruction in music has been made for each school, and all of the teachers have been required to prepare themselves and teach this subject. In two of the townships a special director of this subject has been employed and the plan works well and is approved.

All new one-room buildings are frame and built with furnaces under them, and especial care given to the ventilation and lighting. The wells are all being driven, and care taken to have the schoolyards dry, by graveling in front of the house. Two township high school buildings have been erected, of six rooms each, at a cost of $13,000 and $15,000 each—modern in every way.

One of the greatest needs in the schoolhouses of the country is some appropriate decoration for the walls. In only one school have pictures been bought at public expense for decorating purposes. The walls are too generally covered with too large a number of cheap pictures. An effort will be made to have the trustees give this especial attention.

In our township institutes the teachers' reading circle work is reasonably well done in the forenoons, and the afternoons almost wholly given to the discussion of the problems of the teaching process. We discuss how to do various things, aiming to make ourselves conscious of what we are

doing and what we are doing for. It has resulted in adding an interest to this work, and helping the young teacher materially.

It will continue to be the policy in this county to urge those persons preparing to teach to make some preparation before beginning the work, and to continue to better prepare themselves while they are in the profession. It will also be the policy to keep the country schools well graded and to make them as few in number as possible. We shall make an effort to secure better furniture and working apparatus in all the schools; better heating and better buildings.

Respectfully,
ISAAC F. MYER, County Superintendent.

CASS COUNTY.

Logansport, Ind., September 20, 1902.

Dear Sir—The most important work that has been done in the Cass County schools in the last two years has been the completion of the grading of all the schools, both town and country. With the start we now have, the schools bid fair to increase their value immensely.

Improvements are being made in the new buildings erected. They are being planned by good architects and made of the best material. The roads are also being rapidly improved. In the last two years more than one hundred and twenty-five miles of free gravel roads have been built in the county. This will have a tendency to make centralization more practicable. In two townships both centralization and consolidation have been tried with satisfactory results, though not on an extensive scale.

Our beginning teachers are bright young people, many of them having had four years of high school work. About 80 per cent. of the teachers of Cass County attend good normals during the spring and summer. Every teacher in the county enrolled this year at the institute, and about twenty-five cadets besides. The high school and township principals have formed an organization known as the County Directory, meeting each month. This organization has proved of value to the schools. This year music will be taught in each school in the county.

For the future, I sincerely hope and believe that Cass County will continue to increase the efficiency of her schools as she has in the past.

R. C. HILLIS, County Superintendent.

CLARK COUNTY.

Jeffersonville, Ind., September 26, 1902.

Dear Sir—The growth of the public schools in Clark County for the past two years has been steady and in many ways rapid. Our school buildings, in some localities, are comparatively old and unsanitary, but all those built in recent years are a great improvement over the old ones, and in many places are models of sanitary completeness and architectural beauty. Much care has been taken with the school grounds, and there are very few yards now that do not have good walks and a number of beautiful shade

trees. Arbor Day is very generally observed, and year by year our schoolyards are growing into beautiful parks, with trees, grasses and pretty flowers. Pupils take an active interest in these, and in a number of the schools they prepare the soil, plant and cultivate the flowers, and take much pride in the results of their labors.

There is a visible improvement in the school furniture that has been procured in the last few years. The seats, maps, charts, etc., are of the latest and most improved variety. Kindergarten supplies are furnished in many of the primary departments, and much valuable material has been added to our high schools. School decoration is receiving great attention. Teachers, pupils and patrons are all lending a hand, and our schoolhouses are fast becoming places of beauty and attraction, as well as centers of learning and culture. In every schoolroom in the county something has been done to add to the attractiveness and beauty of the walls, and in many of them the decorations are ample and quite pleasing. The trustees have caught the spirit, and nicely papered rooms and neatly painted buildings are the results of their enterprise.

Probably the most distinctly progressive movement in the schools of Clark County within the past few years is the work done in our high schools. Our county has two commissioned high schools and six noncommissioned high schools, and these are enrolling each year several hundred of our brightest young men and women. Public sentiment supports these schools to the utmost, and we are accomplishing far more than ever in this line. We have an organization of the high school teachers, which is doing much to unify the work, improve the course of instruction and promote a spirit of co-operation among the teachers. We have a uniform set of high school text-books, and work done in one school is given full credit in any other.

Music in the grades is very popular with teachers and pupils, and every possible effort is being put forth to make the instruction practical and to accomplish the best results.

Centralization of schools is being accomplished in some places, but nothing of any very great consequence has been done in this line, owing to the lack of good roads and hilly country over which most of the pupils have to go.

The people of Clark County are all deeply interested in the public schools, and are working with the teachers and school officials to make them accomplish the highest possible amount of good. The one distinctly encouraging feature that points to the continued rapid progress of our schools is the fact that all our people, old and young, are giving them their most earnest support in every way. Whatever tends to the upbuilding of the great public school system will have the loyal support of every citizen of Clark County. SAMUEL L. SCOTT, County Superintendent.

CLAY COUNTY.

Brazil, Ind., August 25, 1902.

Dear Sir -In regard to school teaching, some progress has been made; more effective, contentive teaching was done the past two years. This is shown by the results on both bimonthly and diploma examinations. This advance is due primarily to three things—the increased efficiency of the

teachers themselves; to an intensified school spirit, and to a better understanding of the course of study.

The attendance in this county for the past two years has been good; the truant officer has helped in this to some extent. The average daily attendance for 1900 was 6,397; for 1901, 6,196; for 1902, 6,148. The decrease was due to two things principally—decrease in the school population and to more care in making reports. Only three schools in the county had an average daily attendance of less than twelve last year. On the other hand, the per cent. of attendance based on the enrollment was, for 1900, 72 per cent.; for 1901, 73.6 per cent.; for 1902, 75.6 per cent, thus showing a steady gain of about 2 per cent. a year.

A steady growth toward a better administration of school affairs is noticeable; the influence and importance of the county superintendent's work is felt by both teachers and patrons; the importance of the county organization has grown with this feeling; his instructions and suggestions are acted upon; the teachers are beginning to view the superintendent as a co-worker and helper, rather than one whose sole work is to tear down. Teachers are beginning to view healthful criticism as a measure of their work, and hence helpful. This is a hopeful sign; it leads to self-criticism.

Trustees are devoting more time to school affairs, visiting schools, attending institutes and other teachers' meetings; they are using better judgment in the selection and placing of teachers, thus reducing experiments to the minimum. A friendly rivalry has sprung up with regard to securing the best teachers.

The matter of schoolhouse construction has received increased attention the past two years; the location, the lighting and heating; the whole subject has been studied. One building has been built from plans and specifications prepared at the suggestion of Dr. Hurty; others are under construction now. Your biennial report has done much along this line; more patrons should receive it.

No practical test has ever been made in this county of centralization; the most that has been done is to abandon the small schools. Four were abandoned last year, two will follow this year. The centralization sentiment is growing. In some parts of the county it would be practical; in other parts it would not.

Sanitation is receiving more and more attention each year. Paper and paint have transformed many of the dingy schoolrooms. Outbuildings of the rudest kind are gradually being replaced by brick vaults. Much needs to be done along this line.

The water problem is one needing attention. Many schools are not provided with wells; pupils have not water enough to drink, much less water with which to wash their faces and hands. Draining of wells by mines, lack of wells, lack of funds to sink wells, lack of a knowledge of the value an abundant supply of water has upon efficient school work, all contribute to this condition of affairs. If the school township can not provide the water, the civil township should.

County institutes have been conducted on a two-year course plan, each instructor having two years to present his subject. This plan has made the work more abiding and has contributed to a better school spirit. The average daily attendance has been from fifteen to twenty more than the

number of teachers required in the county. All school corporations paid their teachers for attending county institute last year, except one.

Township institutes have been encouraged and are doing a good work. Most of the institutes have been joint institutes. This adds a tonic of township pride to the work; it gives broader scope to the good things worked out during the year; it encourages a better social spirit.

Practically all teachers in the county are members of the Teachers' Reading Circle. This work is well done in many respects. Teachers take an especial interest in the work. Abiding work is being done—work such that it contributes daily to the efficiency of the school work. Three teachers took the R. C. examination in July. One applicant wrote on five subjects; one on four; one on two. Their reports show grades from 90 to 100. Forty per cent. of the teachers in the county can do that well, if they would take the examination.

The Y. P. R. C. has contributed much to the interest in schools and to the school spirit during the past two years. Over seven thousand membership cards have been issued the past three years and over six hundred diplomas. Teachers, patrons and pupils have responded nobly to this line of work. Most of the books have been secured by effort of the teachers. Trustees should aid in this work.

The high school work in this county needs attention. This work is in its genesis; it needs unity with reference to the county and to the commissioned high schools in the county. This phase of school work is now receiving attention.

The superintendent's future policy is:

1. To systematize the high school work.
2. To foster the present school spirit.
3. To encourage the abandonment of all small schools, and to cultivate the sentiment for centralization.
4. To provide a suggestive course for opening exercises.
5. To hold "up the hands" of the country school teachers. All of which he can not do.

JAMES M. TILLEY, County Superintendent.

CLINTON COUNTY.

Frankfort, Ind., September 15, 1902.

Dear Sir—No material change has been made in this county in the past two years in the methods of teaching. Our teachers are wide awake and use the very latest methods of instruction. Most of them are graduates of some high school or higher institution of learning, or have had some years of experience.

Under the compulsory education law, the attendance in our schools has been greatly improved, especially in the primary grades. But the maximum age limit being so low it has rather tended to decrease the attendance in the higher grades. This, I think, is owing to the fact that the law, puting the age limit as low as fourteen years, is a suggestion to the pupil and parent that that age relieves them of further moral responsibility as to attending school, as well as the legal responsibility. The age limit should be sixteen, instead of fourteen, years, with a proviso, possibly, that sixty or eighty days be the minimum time a pupil must attend between the ages of fourteen and sixteen.

Clinton County has made considerable advancement in the past two years in ideas of schoolhouse construction. Until recently our trustees and patrons have thought that a common square house, with four walls and a box stove in the center, good enough for the country school. But I am glad to say that these ideas have changed, and last year two new one-room district schoolhouses were built that are models as to beauty of design and sanitary arrangement. They have the main room, two cloak rooms, one for the boys and one for the girls, a large vestibule, and a small room opening from the schoolroom, and taking up part of one of the cloak-rooms, in which the stove is placed. This room is built up solidly of brick and lined with plaster and asbestos where needed. There is a register under the stove, which is connected with the outside foundation wall by an air duct that furnishes a constant supply of fresh air. This air is heated as it passes up around the stove. The current carries it up and out through a register over the door, above the pupils' heads, into the schoolroom. The flue to the heater is double, with a sheet iron partition, one side extending down beneath the floor. The hot blast from the stove flue heats the sheet iron, which, in turn, heats the air in the other flue, causing an upward draft. This shaft takes the foul air from the schoolroom through small openings near the floor. This makes a good system of ventilation and, at the same time, heats the room evenly.

Clinton County is naturally tending toward centralization of schools. In one township the agitation became so strong last year that almost the whole township met to debate the question as to whether the trustee would be justified in uniting his schools in one central school. We are proceeding gradually, however, by dropping out the small schools, one at a time, and transporting the pupils to some convenient point. Where this has been tried, it has given general satisfaction. In but one case have they re-established the school, and that was on account of the distance and the bad roads.

The high schools are in a flourishing condition. We have a uniform course of study and uniform text-books. The Kirklin school was commissioned year before last, and the Colfax school will ask for a commission this year.

The greatest need of our schools, as I see it, is better sanitary conditions, better houses, better methods of heating and ventilating, better closets, better drinking water. My efforts have been especially to improve these conditions, and shall continue to be during my term of office.

Very truly,

J. H. GROVER, County Superintendent.

CRAWFORD COUNTY.

English, Ind., August 8, 1902.

Dear Sir—The progress of Crawford County schools in the last two years has been distinctly along two lines, viz.: The professional standing of teachers and the interest of the pupile in the schools.

Last year more teachers and those preparing to teach attended school than ever before in Crawford County. Of the 96 teachers in my county, only 19 were not in school last year. One of the praiseworthy features of

this attendance is that teachers are awaking to the fact that it is cheaper and better in the end to attend a recognized State school than a cheap normal. The teachers' institute is more spirited and helpful. As long as I am superintendent I shall labor to raise the standard of teaching and keep Crawford abreast with the best counties of the State.

The people as a whole now realize that an education will help them do whatever they may do; and boys and girls upon the farms should have the very best education Monthly report books for pupils have been a great means to bring the proper relation between the parents and the school. The average daily attendance this year was about two hundred more than last year, while the enumeration and enrollment are smaller:. The interest in higher education is growing. Every incorporated town in our county now has a uniform three years' non-commissioned high school course. Pupils from five of the townships come to these high schools. Two other townships, where no incorporated towns are, have high schools; thus only two townships out of nine have no high school privileges. Centralization of schools is possible, but not practicable in our county, owing to broken service and poor roads.

The schoolhouses that are built now are a decided improvement over the old ones in hygiene and sanitation. The average size is 24 by 32 feet—32 feet east and west and 24 feet north and south. As the sun is in the south in our winter, so we place six windows on the south side. All along the north side is the blackboard. Pupils sit facing the blackboard and the light comes over the shoulders. One window in each end. In the southeast corner of the house is the door. The seats are arranged so aisles are about each row, and each row for a certain year's work of pupils. By this arrangement the time of marching to and from the recitation seat is avoided. The teacher is enabled to work among the scholars. Everything else being equal, schools in such houses are better than the old ones. I feel no little pride in the present standing of the schools of my county, and hope that the lines of work commenced shall continue.

I recommend two things for our coming Legislature: First, that there be some adjustment of the law requiring a six months' term of school, and the teachers' wage law, whereby our county can have six months' school without making the tax rate so high. That the school trustee be given more latitude on the rate of wages. Second, that the rate of transfers be changed to the amount that each pupil draws from State, county and corporation, to which such pupils are transferred, to be paid by the trustee of the corporation from which the pupil is transferred, as is now provided by law.

Yours in education,
CHAS. A. ROBERTSON, County Superintendent.

DAVIESS COUNTY.

Washington, Ind., September 23, 1902.

My Dear Sir—In response to your letter of July 2, 1902, requesting a statement of the educational conditions in and progress of the school work in Daviess County during the last two years, I respectfully submit the following:

School Teachers.—Daviess County has 187 teachers—134 in the townships, 9 in the towns and 44 in the corporations having commissioned schools—the city of Washington and the town of Odon being the only commissioned corporations.

Of the 187 teachers only 13 have not had some professional training, and 6 of the 13 are graduates of either the commissioned or non-commissioned high schools of this county; thus leaving only 7 teachers employed for this year who have had nothing above the common school work.

For three years Daviess County's representation at the State Normal School has been above forty; or, to put it in another way, one-fourth of the teaching force of the county has been for some period of time students in the recognized professional training school under control of the State.

Last year this county had 25 students in the State University, and 50 students in normal schools other than the State Normal, or between 115 and 120 teachers who were seeking to improve their professional standing. Of the remaining 70, many are graduates of the best schools of the country.

It is my firm conviction that the most important factor in a good school is a good teacher. Many other things may have their influence, but a good teacher is the first essential in the success of any school. We can have such teachers only when they are professionally trained. Indeed, the time has come when no one should be permitted to enter the schoolroom who has not had at least a reasonable course in a school whose work is specially to train teachers.

School Attendance.—The average daily attendance for Daviess County has gradually increased since the passage of the compulsory law. The average daily attendance for 1900-1901 was 5,236, with an enrollment of 7,370. This year's report shows the attendance to be 5,587, with an enrollment of 7,360—a gain of 351, or over 6½ per cent. on an enrollment of ten less than the previous years. This is surely a substantial gain in school attendance, and it speaks well for the truant officer and teachers who have so earnestly worked to have all children who come under the provisions of the compulsory law in attendance at school. In this connection, it might be well to say that, in my judgment, the compulsory law is doing a grand work, and it must only be modified or changed in a conservative way, and only then to make its provisions a little stronger. Public opinion has changed wonderfully in regard to this phase of legislation, and there is now no question but that a large majority of the people favor the law with its strict enforcement.

Administration.—There is no doubt about there being a strong educational sentiment in this county. The administration of school affairs during the last few years in townships, towns and city has been gradually improving.

School officers everywhere pride themselves upon the condition of their schools; and better houses, better apparatus, better surroundings, and, above all, better teachers are the outcome. All the townships with one exception are building good, substantial brick houses. The trustees are finding out the importance of making official visits to the schools, and by personal inspection they are learning how and what to do to improve their schools.

During the eight years of my work as county superintendent, I have not failed to visit any school under my supervision. It has always been my policy to see the good points in the teacher's work, and to give full praise and credit for them. The weak points were incidentally mentioned to the teacher, and such suggestions given as I thought would be most likely to stimulate the teacher to do better work. I think I may truthfully say that in this way I have secured the good will and co-operation of every teacher in the county. They are all earnest, honest workers, and, if you will pardon me, I am proud of the teachers of Daviess County.

Needed Reforms.—It is my sincere belief that the school trustee should be a man specially qualified for that work. It is his duty to hire the teachers, see that they do good work, and in every way to advance the cause of education. How can these things be done by any one who is lacking in educational qualifications equal at least to those of his teachers? True, the county superintendent's duty is to visit the schools and to be the general supervisor of all the school work. But how can one man properly supervise from 75 to 200 teachers, nearly all of whom are teaching the country districts? Bad roads and long distances to travel will take up half the time of the superintendent during the winter. He does extremely well if he visits each school twice a year, and he does well in the larger counties if he visits all of the schools once. How can there be proper supervision of schools with but one visit of the supervisor during a period of six months? Surely no sane man will argue that such a condition of supervision is ideal. Such is the condition of the supervision of schools in the country districts of almost every county in Indiana. What is the remedy? One or two things suggest themselves to me. First, the school township must be divorced from the civil township, and a school trustee must be required to have educational qualifications sufficient to enable him to supervise the schools of his township, or the county must be divided into districts of reasonable size, and have appointed or elected supervisors of schools, thoroughly qualified to do the work of supervision.

The county superintendent should be kept in either case and should have the general superintendency of the schools. His work should be almost wholly executive, and provision should be made so that little of his time would be employed in clerical work.

Perhaps some will say that we have enough officials as the law now stands; but we do not have proper supervision of the country schools, and this supervision must come no matter what the cost.

Schoolhouse Construction.—There has been quite an improvement in the building of schoolhouses in most of the corporations of this county during the last few years. The new houses are of brick and, as a rule, are well designed. The township high schools have practically all been built during the last six years. Of the 132 houses in the county, 43 are brick and 89 are frame. The total estimated value of school property for the county in 1902 is $254,145.

Centralization of Schools.—The centralization of schools in this county has not as yet been tried. The condition of the roads in the past has made it wholly inexpedient to attempt it. At present about eighty miles of gravel roads are being constructed, and as public opinion is turning in favor of the centralization of the country schools, it is probable that the matter will be given a test in the near future.

Sanitary Affairs.—Nearly all school property is in fairly good sanitary condition. The water supply is too often not good. Ventilation has been properly arranged for in the new houses, but in some of the old houses it is very bad. The teachers, as a rule, look well to the proper ventilation of the houses where it is at all possible. Some outhouses are in bad repair, and too often the closets and vaults are not properly cleaned and disinfected.

As to the Future.—It is my purpose to further increase the efficiency of the township high schools; to press upon the teachers the vital importance of having a careful professional training for their work; and to urge the continued enforcement of the Compulsory Education Law.

Very truly yours,

WILLIAM A. WALLACE, County Superintendent.

DEARBORN COUNTY.

Lawrenceburg, Ind., September 5, 1902.

Dear Sir—In reply to your letter of August 25, I am glad to state that there has been a noticeable improvement in the schools of Dearborn County in the past two years. The teachers have made an effort to secure good attendance and punctuality, and have met with such good success that the number of cases of absence and tardiness has been considerably reduced. Since the compulsory school law has gone into effect, the attendance has been almost perfect.

Almost without exception the teachers are much more regular in their attendance at county and township institutes than in former years.

At county institute of 1900, 144 were enrolled.

At county institute of 1901, 148 were enrolled.

At county institute of 1902, 138 were enrolled.

In 1900, 126 heard all the lectures; 1901, 128, and in 1902, 134.

The teachers are making a strong effort to raise their grades in the subjects in which they are examined. The result has been that a large number have secured two, three, five or eight year licenses, while the number teaching on a twelve months' certificate is smaller now than it has ever been before to my knowledge in this county. Of course, the wage law has been an important element in bringing about this result.

One trustee only has tried transportation of pupils. He has found the expense to be much less than formerly, and I hope to see other trustees profit by his success.

Trusting that I have answered your letter satisfactorily, I remain,

Very truly yours,

S. K. GOLD, County Superintendent.

DECATUR COUNTY.

Greensburg, Ind., September 6, 1902.

Dear Sir—Decatur County has several line of distinct effort for advancement in educational work.

(1) An effort is being made to develop the convenience and comfort of all school property. Attention has been given to the condition of floors.

Most rooms now have papered walls and slate boards. Drinking water is generally supplied from driven wells.

(2) The equipment of rooms for educational work is meeting with encouragement. There are now about eight thousand books in the school libraries. Each school is supplied with a library, most of them having convenient cases in which to keep the books. Other apparatus and school helps are being introduced. Some attention is given to the proper decoration of schools.

(3) New buildings are supplanting the old ones. This year, 1902, five new buildings are being constructed, all on sanitary plans.

(4) Teachers are growing more professional. More teachers from year to year are acquiring professional training. More effort is expended in studying the vital problems of the school.

(5) Efforts are made to keep a regular attendance. Local difficulties, however, decrease the efficiency of this movement.

(6) Township institutes are receiving constantly increasing attention. Assignments are now issued to each teacher of the county, making necessary the preparation by each teacher upon the entire line of work suggested for the institute. Institutes are conducted upon the recitation plan, the township principal or county superintendent taking charge of the entire work. The township principals and county superintendent meet once each month to study the work and decide upon points to be made especially strong in each session. Local questions of importance are included in the assignments.

(7) No decided effort toward consolidation has been made. The plans for the coming year center mainly about three points: 1. The equipment of the schools with suitable apparatus and devices. The efforts to develop the school library are continued with renewed energy. New books will be added to the library in every school. The books selected for the year are such as will supply interesting reading material and valuable supplementary work for the various subjects taught in the several grades. It is desired to give the pupil the best possible mastery of important subject matter, to increase the desire for good literature, and to cultivate the power of investigation. A complete set of material for devices and busy work has been collected. With this a teacher can logically present the subject matter of the various subjects, and make lasting impressions upon the minds of the pupils. It is also valuable for its suggestions along lines of work not directly covered. This set of apparatus will be introduced into many schools of the county. It is introduced by townships. Each township when selecting supplies all of its schools. 2. Attention is being drawn to the direct work of the recitation. It will be the distinct aim of each teacher for the coming year to impart ideas directly, rather than empty word forms. Pupils are to be taught until their minds comprehend the truth presented. After this each teacher will be required to demand proper oral expression, to review and organize the work frequently, and to apply the truths until the pupil gains power and speed in application. Nothing but thorough mastery will be recognized. This makes up the central aim for which each teacher will be expected to labor during the year. This is the one thing they will be expected to attain. As an aid to this they will demand a mastery of all the mechanical processes in the various subjects. 3. Special attention is to be given to the township institute work. Each

teacher will be called upon to master the texts submitted for the year, and to associate the theories studied with problems arising in their own school work.

In addition to the above plans all former lines of progress will be kept in mind and a constant effort will be made to better such conditions.

As to legislation, will say that, in general, the school system seems to be working very well. The greatest need of the hour, of course, is better trained teachers, teachers who make their business a profession. Legislation, however, can only assist in this matter.

The duties of the county superintendent should be more definitely defined, and the standard of the qualification should be raised.

I think the law granting pay to teachers for attending county institutes should be repealed; that this additional amount should be paid to teachers as wages for work done in teaching, rather than for work in securing professional training. I think a law paying just wages to any teacher who would reach a certain high standard of scholarship and of professional training would do much toward increasing the efficiency of the school system. This standard should be high indeed; should be such that would make teaching a real profession. The wages paid under such conditions should be a fair average of returns for work in any average profession.

Most respectfully,
ELMER C. JERMAN, County Superintendent.

DEKALB COUNTY.

Auburn, Ind., July 11, 1902.

Dear Sir—In reply to your letter, requesting statements showing the progress of the schools of the county for the past two years, I will say that I firmly believe that DeKalb County has been and is now carefully and analytically inspecting the new ideas of education as they develop, and that she is appropriating to her various needs such of them as seem best suited to her ability to utilize. In this I mean the new ideas pertaining to the work of teaching and school management.

The recent law regulating teachers' wages has had the effect to increase the salary of the teacher in Dekalb County 33 per cent. This increase in salary has brought a demand for increased professional ability. We are now justified in expecting more of the teacher, better work and better results than ever before in the history of the county. This efficiency applies to the high school work as well, so that now no high school teacher should be permitted to teach high school branches on a common school license. In fact, the law is violated when this is done.

I think it quite well understood in Dekalb County that higher qualifications are required of the teacher than perhaps ever before. The times demand it; the new laws require it. Our license system is well nigh perfect; yet, it seems to me, there is one weak spot in it in the exemption license feature. It permits the teacher to reach in his formative period a place where his county makes no further demand upon him for progress, so far at least as license qualifications are concerned. Too many of our young teachers who make good beginnings are tempted to stop at

this suggestion of the system. It is like the license qualification of the county superintendent—it is too low a standard to assume as a stopping place, if the best results are desired.

Dekalb County, like other portions of our State, has to meet many and serious obstacles in adopting the new lines of educational progress as fast they are needed. The old forms and views of teaching having served their day and generation so well, are not easily disposed of in the new age. Superintendents and teachers, seems to me, should at all times be keenly aware of the significance of the new lines of work, that they may be ready to utilize them as soon as opportunity offers. We find, however, that adopting the new in practice is by no means an easy task, especially when its adoption will in any way change the customs or fixed notions of the public. As illustration, we find it quite difficult sometimes to abandon certain districts or schoolhouses in which the attendance is really too small to justify the maintenance of a school. The coming step in modern progress is no doubt "centralization," and the abandonment of small schools is but a preliminary step in that direction. The equalization of advantages of high school privileges of country children with those of the towns and cities has been legally brought about in the transfer law for high school privileges. This excellent law had at first to face considerable opposition, but there now exists in Dekalb County little opposition to it. Legalized progress after all is the most effective. The sentiment in favor of centralization is rapidly gaining in Dekalb County. As I have suggested, the worst opposition it has to-day grows out of prejudice engendered by custom; that is, in this case, many seem to think that they must have "the schoolhouse at the cross-roads." When the people are led to see the benefits of graded schools, such as can be obtained and maintained by centralization, much of the existing opposition will disappear. Of course, there still exists the usual opposition attending such enterprises; that is, the expense of the new buildings, but that argument loses some of its force when it is seen that the annual expense of the schools would be lessened.

The best thing that Dekalb County could do with many of her old school buildings now in use would be to dispose of them to the best advantage and build new, that the important matter of sanitation might have due attention. Many of the old buildings are but traps to catch and destroy the vitality of the growing child. There is a strong sentiment in Dekalb County favoring school buildings with better sanitary conditions. The schoolhouses lately constructed in the county under modern plans of sanitation bear us out in this statement in the good already done and suggested by them.

The rigid enforcement of the truant law of the State has greatly increased the attendance in our public schools. Perhaps not so much in the two years last past as in the previous years since the enactment of the law.

Our health officers are giving careful attention to the sanitary conditions of the school buildings and premises, to the effect that the schoolrooms, premises and outbuildings are kept in better sanitary condition than heretofore. The original structure and location of some of the school buildings do not admit of the best condition, but I believe that we are making the best use of the means we have. Better buildings, however, would

insure better health conditions to our boys and girls who must attend the public schools.

My desire is now and has ever been to fill our schools with teachers more proficient in the branches which they teach, and especially that they may have broader knowledge of the affairs and circumstances of life which tend to mould the destiny of the child for better moral and physical as well as mental life. Believing as I do that our State is right in her desire to specialize the work of teaching, to secure better school environment for the child, to secure a better state of gradation for the district schools, to see that every boy and girl between the ages of seven and fourteen years has a common school education, it is my desire to do all in my limited power to bring about all these better conditions, and even more as they may appear needful.

Respectfully,
H. E. COE, County Superintendent.

DELAWARE COUNTY.

Muncie, Ind., September 22, 1902.

Dear Sir—In response to your request that I submit to you a statement of the progress made in the schools of Delaware County during the past two years and the plans for the future, together with any suggestions for the improvement of the system, I submit the following:

All school have become more thoroughly organized. The matter of classification and gradation has been improved upon somewhat, although this is a problem that presents itself anew each year. Each school is carefully reviewed by myself, as well as by the teacher, frequently during the year, in order that the progress of the pupil may not be hindered. The number of grades in the ungraded school is kept at the minimum to enable the teacher to do effective work, yet endeavoring to place each individual pupil in the grade and class its state of advancement demands. This problem requires much time and study, and should have experienced supervision. Delaware County has too many schools by far for one superintendent to give each school the attention it needs, yet there is some improvement. A system of reports has been devised that enables the teacher to show the condition of the school at stated periods of the year, while giving me an opportunity to review the work done and the progress made.

The standard of qualification of the teacher has been raised somewhat. The public is demanding teachers thoroughly trained for the work. There are a number of teachers in the county who have completed a full college course. There are others that have had some special training for a particular grade of work. The increase in the number of graded schools requires that many of the teachers specialize for a particular class of work. The greatest progress has been made in the preparation for primary and high school work. The district teacher and the intermediate grade teacher do not specialize so frequently. It is somewhat difficult for the district teacher to specialize, however, owing to the diversity of work. The trained teachers and the successful experienced teachers are more often placed in the graded schools, leaving the district schools for the beginning teacher. There is much need of trained and experienced teachers in all the schools, but especially in the ungraded district school.

The movement toward the consolidation of the smaller district schools with the larger graded schools has received much attention during the past two years, and is receiving favorable consideration by the public. Hamilton Township is now using eight wagons to convey five outside schools to the central school at Royerton. Two years ago but two wagons were in use to convey two schools. The number of teachers in the graded school at Royerton has been increased from two to five by the change from the separate district school system to the consolidated school system, while the number of district teachers has been decreased five. There are now but two district schools in the township. By this consolidation of schools a three-year high school course is offered in the township without an increase in the expense of maintenance. The results have been most gratifying.

Perry Township has been quite successful in the change. It has three wagons in use to convey four districts. This is the first year for the change, yet the prospects are the most favorable for a successful school year. One additional teacher has been placed in the central school, while the number of district teachers has been decreased three.

Liberty Township has abandoned two schools within the last two years, and is now using two wagons to convey three schools to the central school at Selma. No additional teachers are required in the Selma school. Center Township is conveying two schools to the graded schools by using two wagons. Salem Township is now conveying one school, while Monroe Township has abandoned one school and is conveying the pupils to the central school at Cowan.

There is a large number of schools that could be abandoned and combined with larger graded schools without increasing the cost to the townships. Some schools are being maintained that have an enrollment as low as seven. There are many others that have an enrollment as low as fifteen. Some of these are situated within convenient distance from the graded schools of the townships and where the roads are excellent. An effort will be made in the future to abandon these schools and combine them with the graded schools.

The county is looking forward to the introduction of music under the direction of a supervisor. Center Township has led in this movement by adding a music supervisor to her corps of teachers last year. Hamilton Township, and the towns of Eaton and Albany followed this year by combining the three corporations and employing one supervisor. Other circuits and combinations can be made as the consolidation of schools progress. The growth of electric interurban lines will also assist in this movement.

The music supervisors are considered as assistants to the superintendents, with their office at headquarters. They are to work under the same direction and employ a uniform system. It is hoped also that a supervisor of grade work be added to the corps of assistants to the superintendent. It would be the duty of this supervisor to carry out the details of the system. One township in the county—Center—has 36 teachers. This is as large a corps of teachers as is employed in a city of 8,000 inhabitants. In such a city there would be a superintendent who would devote his entire time to the supervision of this work. To secure the best results there should be some provision made for the better supervision of the work of

the country schools. The cities have long ago realized the need of careful supervision.

Manual training has been introduced into the schools of Center Township. Paper-cutting, paper-folding, basket-making, raffia-weaving, etc., is given in the grades from the first to the fourth inclusive. Above the fifth grade the boys will receive instruction in wood-working and the use of tools, while the girls will be instructed in sewing and housework.

An effort will be made this year to better the work of the township institute. The increase in the number of the graded schools has caused the teachers to specialize along certain lines, making it difficult to arrange a program for the institute that is equally valuable for all. The primary teachers are not directly interested in the work of the higher grade teachers, while the higher grade teachers need work of a different nature from that of the primary teachers. This difficulty will be overcome by consolidating the township institutes. Several townships will be combined. The body of teachers will be divided into sections—the primary teachers in one section, the district teachers in another, while the higher grade and high school teachers will be in another. This organization will be made permanent for the year. This will enable the superintendent to be present at each institute and to direct the work, thus coming in contact with each teacher once a month.

The high schools of the county have been improved very much during the past two years. Every township either maintains a high school or transfers the pupils eligible to admission to some convenient school in another corporation. The Albany school has been commissioned within this period. There are a number of schools that will soon ask for commissions.

In conclusion, I would say that the schools of Delaware County are in excellent condition, yet with the great opportunities for improvement.

Very truly,

CHARLES A. VAN MATRE, County Superintendent.

DUBOIS COUNTY.

Jasper, Ind., August 25, 1902.

Dear Sir—The north half of Dubois County was settled by pioneers, who came here by way of the Buffalo trace from their homes in Virginia, Kentucky, Tennessee and the Carolinas. The south half was colonized by Germans. Then the early settlers in the north half of the county began to move west, and their farms were occupied by a third class of people. The construction of railroads brought a fourth class that mingled with the earlier citizens throughout the county. Thus various nationalities of many different religious denominations, possessed of much love for the country of their birth, and devoted to habits of industry, frugality and perseverance, became citizens of the county.

Two languages, the conservative habit, conflicting interests and close attention to individual interests, rather than general development, have made public school work in Dubois County far more difficult than in many other counties. One-fifth of the children who attend school go to private institutions, whose buildings, furniture, school supplies and grounds are far superior to those of the public schools. More than one thousan

children are thus educated; many, however, follow the State's common school course, and pass a creditable examination.

In many of the public schools several languages are taught; in a very small number even the different dialects of the same language must be understood by the teacher, in order to successfully instruct the pupils. The school officials, to meet with any degree of success with the pupils, must be able to understand and converse in the German as well as in the English language.

On the other hand, let me add that our people are most excellent taxpayers, law-abiding, and sincere in what they see is right. Our teachers are industrious, faithful and earnest, while our pupils are attentive, docile and given to do that which is right and proper. It is difficult to introduce new methods, ideas and systems, but when once acknowledged to be good, safe and reasonable, they are always accepted and followed with a devotion worthy of the cause.

Nearly every teacher in the county has attended some good normal many the State Normal; some the State University, and some go annually to Winona The school attendance, on the part of the pupils, is far better than reports of the public schools indicate, by reason of the thousand pupils in private schools. Leaving the schools at the age of fifteen for the fields and shops is our greatest loss. All believe in the ordinary common education, such as is generally understood by the "three R's," and so far, at least, all children go. It is the higher form of learning, such as the commissioned and non-commissioned high schools, that are not so easily sustained. We can not say the new township advisory law has been an improvement to our school system. We can can hardly say that the truancy law is popular, though respectfully obeyed when enforced by a thoughtful, tactful, conscientious and sincere truant officer. The textbook law was enforced from the enactment of the law, and a law reducing the prices of books for the use of the German pupils, and those in our high school would be favorably considered.

We think the common school graduates' examinations should begin in February in place of March, thus giving pupils and teachers an opportunity to prepare, arrange and hold commencement by the time the school terms close.

The great distance to travel by driving, and the great amount of office work, prevent anything like the proper supervision of the district schools by the county superintendent. There are more schoolrooms than school days, and were there no other duties to perform from the beginning to the close of the school terms, one could not spend even one day with each school. All clerical work should be done by an assistant, thus giving the county superintendent time to go where most needed. There is four times more work now than ten years ago, yet the time to do the work remains the same.

Trustees had begun the erection of reasonably good schoolhouses for district school purposes before the enactment of the advisory law; now they are hampered, and frequently houses are built at variance with the educational spirit of the age and the sanitary necessities of the times. A law specifying the proper construction of schoolhouses, placing the same under the supervision of the State Board of Charities, or some such body, who could furnish plans and specifications and enforce compliance is

needed. Certainly our schoolhouses and pupils deserve as much care and consideration as our jails and prisoners, or our poor asylums and their unfortunate inmates.

No attempt has been made in this county at centralization, and it will not likely be considered soon, for various reasons, chiefly on account of the many streams that divide our townships into small school districts.

There is a general demand among our citizens for higher scholarship on the part of teachers, and many are arranging their work to spend at least several weeks in travel and normal schools every summer.

Some school corporations, even with a levy at the limit of the law, can not reach a term of six months. All school officials, and other friends of education in Dubois County, join me in asking that the State levy be placed at its old figure, 16 cents. The reasons for this are obvious. The common schools are State institutions in many respects, and deserve support from the State at large, just as the State Normal, State University and many other State institutions receive. The taxing power for the State is not local, not influenced by one or two rich tax-payers, or corporations without children and without souls. Much of the State debt has been paid, and the alleged cause for cutting the State school levy no longer exists. Both political parties took a turn at raising the local levy to the limit of the law in poor townships by lowering the State levy 5 cents. May the party that is in power in 1903 restore the levy to 16 cents, and thus eliminate local influences and relieve struggling school corporations in Indiana.

Respectfully,

GEORGE R. WILSON, County Superintendent.

FAYETTE COUNTY.

Connersville, Ind., September 1, 1902.

Dear Sir—School Teaching.—The teachers of Fayette County no doubt have had about the same scholastic and professional training as those in other counties in the State. Almost all of them have completed a high school course, and quite a large per cent. have attended higher institutions of learning. Perhaps the district schools suffer most from the teacher's inexperience. Every year about one-fifth of the township teachers are teaching their first term. Some succeed quite well, while others fail. The children who are so unfortunate as to have to attend the poorer schools are practically robbed of their school advantages for one year, as it is the custom to let all teachers complete the term.

The subjects taught are those outlined in the State Manual, and the townships provide two or three years' high school work. Graduates from the township high schools are encouraged to complete the commissioned high school course at Connersville. Two townships, Jennings and Waterloo, employ a supervisor of music, who visit each school, one a week, to keep the work in that line well organized.

The truant law has to a limited extent improved the attendance in the rural schools. There are only a few families in each township that

require the attention of the truant officer. The influence of the law has been good; so, while it has not been necessary to enforce the law very often, the per cent. of attendance has been raised. There were very few, if any children between the ages of seven and fourteen, who were not enrolled in school during the greater part of the past two years.

There has been very little improvement in school house construction during the time covered by this report. Only two new houses have been built—one a very substantial district school building, the other a township high school building. The manner of heating, ventilating and lighting the new district school building is the same old style, but in planning the township high school building modern ideas were utilized. It tallies quite well with the general plan suggested by the State Board of Health.

In sanitary affairs the principal movement has been along the line of keeping the school buildings thoroughly clean, and having the teachers make most of the means at hand for the care of the children. Some of the trustees have supplied their schools with modern jacketed stoves, and almost all have the floors well oiled.

Seven schools have been abandoned. Harrison, Jennings, Jackson and Posey townships are conveying some of the children to central schools. In general, all seem to be quite well pleased with the plan. The trustees desire to extend the system as rapidly as possible. There are several small district schools that should be abandoned. All acknowledge the necessity of collecting the children into larger groups, but the same objections are encountered here as elsewhere in the State. At the present rate it will not be long until time and experience will wisely meet these objections, and all the children will have the advantages accruing from centralization.

Future Policy.—1. General Management.—The school officers desire: (1) to abandon the smaller district schools as rapidly as circumstances will permit; (2) to have seven months' term each year in every township in the county (centralization will be the principal method of accomplishing this end); (3) to improve the school property by making it more sanitary; (4) to decorate properly the schoolrooms.

2. School Teaching.—The good teachers will be encouraged to continue to teach in the township schools. The school officers hope to accomplish this by making the surroundings more attractive, by improving the conditions for work, and by paying better wages. There is no good reason why the school buildings and grounds in the country should not be as attractive as they are in the towns and cities, and each building be cared for by a competent janitor. The people in the country are as able to pay for good teachers as are the people in the cities; therefore, the compensation, per year, for a required grade of work should be as much in the rural districts as in the city. These changes will tend to retain experienced teachers in the country and to raise the standard of township schools.

Teachers will be substantially encouraged to improve by reading professional books and papers, by attending and taking part in county and township institutes, and by attending normal schools.

CALVIN OCHILTREE, County Superintendent.

FLOYD COUNTY.

New Albany, Ind., September 20, 1902.

Dear Sir—In complying with your request, I would say that during the last few years the schools of Floyd County have been very progressive. Perhaps the greatest improvement in any particular lines of work has been made in reading and sanitation. This is partly due to the excellent books on these subjects in the Teachers' Reading Circle, namely, Clark's "How to Teach Reading," that was in the course a few years ago, and "Sanitation and Decoration," that was in the course last year. These books were a great help to our teachers in that they aroused a spirit of investigation. The teachers soon saw, by comparing their own schools and methods of teaching with the schools and methods that were suggested in these two books, how much reform was needed in these two important lines of school work. Indeed, the one thing of sanitation should be and is now being completely revolutionized. Every teacher is impressed with the importance of properly lighting, heating, ventilating and decorating the schoolroom.

Our teachers have conformed quite closely to the course of study prepared and sent out by the State Department and find it very helpful, especially in case of beginners. It has done more to systematize the work of our country schools than any other factor. By opening all schools on same day (which is done in this county) and having each grade begin its work in all subjects at proper place, as suggested by the course of study, the bi-monthly examinations fit into all schools and all have had equal time for the completion of that particular third of work. A program is adopted for the entire county, and each teacher is asked to use it so far as practicable, so the superintendent knows beforehand what work he will find on visiting any school.

The greatest bugbear to our teachers is the gradation. It is almost impossible to confine the number of grades or years to five, because pupils are each year entering the first grade and others are each year being promoted, which will in time fill up all the grades.

I say, again, it is impossible to confine the grades to five with a system of eight grades, and at the same time treat each grade as it should be treated. This can be done in graded schools only. I mean by this that complete and satisfactory gradation can be had only in graded schools. This brings us to the subject of consolidation of the country schools. This county has done nothing whatever in the matter of consolidation. The county, for the most part, is too hilly and the roads are not yet properly constructed to warrant transportation to any great distance. It seems to me the only thing that can be done in this direction is to reduce the number of schoolhouses one-half and place two teachers in each building. This much can be done, and by so doing no pupil would be compelled to go a very great distance. This, in a measure, would solve the problem of gradation, for one teacher can handle successfully four grades, but can not handle eight grades with success. This much we expect to accomplish in this county during the next few years.

There have been two township high schools in this county for the past few years—one in Greenville Township, the other in Georgetown Township—but both have been abandoned. While the work done in these high

schools has been as satisfactody as could be expected, yet the cost per pupil was too high, amounting to, in one case, almost fifty dollars. The trustees find it much cheaper to transfer their high school pupils to the city of New Albany or Borden Institute (which maintains a high school) than to maintain high schools in their own corporations. This method has proven satisfactory to the patrons, and the result is much better, I think. The township can afford but one or two teachers, whereas the city has a teacher for each particular branch of work. This itself is sufficient evidence that the work of the latter is to be preferred.

While I think the teachers of Floyd County compare favorably with those of other counties in the State, yet I must say the one great need is trained teachers. There are very few now teaching who have not had some training for their work, yet there are very few who have had sufficient training for this noble profession.

Quite a large per cent. of our teachers attended some school during the past summer, and as the wages being paid this year are higher than those paid last year, we have reason to hope that the number who will attend school next year will be correspondingly greater.

The public school teacher is beginning to realize more fully than ever before that the "laborer must be worthy of his hire," and that he must know the material upon which he labors.

Yours truly,

LEVI H. SCOTT, County Superintendent.

FOUNTAIN COUNTY.

Covington, Ind., September 26, 1902.

Dear Sir—In reply to your request as to conditions in this county, the advancement made during the past two years and for suggestions, will say that the work done during the past two years has been a continuation of the work of the preceding five years. Seven years ago there was only one township high school in the county. Now there are twelve. Three of them have been established within the past two years. Every township now has high school advantages. We expect soon to have some of them commissioned. During the past two years we have abandoned many small schools and convey the children in wagons to the graded schools. This and the establishment of the high schools have been made possible by the erection of large buildings in the different townships. We are not forcing things, but are gradually centralizing and abandoning small country schools. We had great oposition at first, but every one seems now to recognize the tendency, and the problem will work itself out. We will run fifteen wagons this year.

Another thing we have had in view has been better qualifications and higher wages for teachers in the new graded schools. The little country schoolhouse will soon be a thing of the past. We expect in our county that the educational affairs will soon be run upon the same plans as those of the cities, with fewer teachers and better wages, and that those who teach will make teaching a profession.

I would suggest that as the transportation of children depends upon the condition of the roads, the entire business pertaining to roads be placed in the hands of the township trustee.

Sincerely yours,
GRANT GOSSETT, County Superintendent.

FRANKLIN COUNTY.

Brookville, Ind., September 1, 1902.

Dear Sir—In the last two years, we have endeavored to get better teachers and to centralize schools by abandoning weak ones. Nearly all of our teachers have some professional training. We have tried to get enough beginners that have completed the high school course and have had at least one term's work in some training school. We nearly succeeded in doing this the present year. We hope to fully accomplish this next year.

In the last few years 17 weak schools have been consolidated with stronger schools. In each case better teaching has resulted. The inconvenience in abandoning schools has been slight. The patrons are interested in the movement for two reasons: It is economical and gives better results. The interest in centralized graded schools is growing.

The reading circles are in excellent condition. The teachers' circle numbers every teacher and many that are preparing to teach. A large per cent. of the teachers hold diplomas earned by examinations. From 40 to 70 per cent. of the teachers take the examination each year. This work has been a great help in building up the teaching force of the county.

The possibilities of the teachers' circle are great, but the possibilities in the young people's circle are even greater. Many of our young people are acquiring a taste for good books, and at the same time are enriching their minds with a fund of valuable information. Many parents and other non-members of the school are regular readers of the books.

School attendance has improved in the last few years. This is due to a growing sentiment for better schools and the Truant Law. The latter has had much to do with making the attendance more regular.

This is one of the old counties of the State, and many of the school buildings have been built for years; hence, in architectural beauty and convenience, are not equal to the buildings in the newer counties. As old buildings are replaced with new ones, much attention is given to beauty, convenience and sanitation. In the last two years a special effort has been made to make the old buildings more attractive. One new modern building is just completed.

The aim of this county in the future shall be that of the past, to put a better teacher in each school with improved environment.

W. H. SENOUR, County Superintendent.

FULTON COUNTY.

Rochester, Ind., September 8, 1902.

Dear Sir—Fulton County consists of eight townships and two town corporations, employing 147 teachers. Schools are maintained in 110 houses, 40 of which are brick and 70 frame structures.

During the past two years educational sentiment has increased, especially with the country citizen. With rural conveniences, such as the interurban railways, the free delivery of mail, the telephone, good gravel roads, etc., our country population are becoming absolute expansionists and want to take in all the good things enjoyed by their city brother.

There are ten citizens' petitions filed at this time with the different trustees, praying for graded and centralized schools, in as many communities in the county. We have a high school in each township except one, and it is preparing to erect a fine four-room building. Some of the trustees will erect barns on the school premises, where pupils that drive may keep their horses during the school session. The janitor will also look after the caring for the horses.

I think the Legislature should enact a law making it possible for trustees to vacate small schools, and establish centralized schools. It might be well to have a critic teacher over a number of schools, who would act as a supervising medium between county superintendent and the teacher. A county superintendent should be relieved of his much clerical work, and given more time to supervise his work throughout the county.

I believe we should furnish free text-books to the child. We have been furnishing seats, tuition, houses, etc., and why stop with a book? The parent must purchase the book for the child, and in a great many cases is no better qualified financially to make this purchase than he is to purchase houses, etc. Much trouble arises in the school on account of the lack of books. This would be avoided. It would also have a tendency to lessen the total number of books used and minimize the expense. Two or more members of the same family would use the same book in consecutive terms. It should be the duty of the school management to see that the keeping of the book is taught as well as the subject matter.

Never before in the history of our schools have the pupils been so zealous of punctual attendance. We have used a small button, which was purchased by the trustees and placed in the hands of the teacher for use. The pupil was allowed to wear it until he was absent or tardy without sufficient cause, when he forfeited the right to wear it until the beginning of a new month. We feel that it causes punctuality to become a part of the pupil's life, and means not only punctuality in school, but in any field of action. The teaching of such a virtue is as commendable as the teaching of the facts of history or the theories of mathematics.

The book stamp was furnished in like manner, and was placed by the teacher on the inside front page of all books that were well kept. The effect upon books, apparatus and all school appurtenances was manifest, as the pupils showed a desire not only to keep their books in the best possible condition, but all things in and about the room. This is initial economy; the taking care of a book is the starting point for taking care of law books, surgical instruments, farm implements or anything that may come into the possession of the child in after life. The efficacy of this life's influence upon the child must not be overlooked in his early school life.

W. S. GIBBONS, County Superintendent.

GIBSON COUNTY.

Princeton, Ind., September 19, 1902.

Dear Sir—In response to your request, I submit the following:

During the school years just closed (1900-1) Gibson County has made remarkable progress along various lines of school work. During this month (September, 1902) another modern four-room, up-to-date high school building was completed and added to the list of high schools in this county. Each township (with one exception) is now provided with one or more high schools in which a three years' course of study is successfully taught. In two townships there are commissioned high schools in addition to the non-commissioned high schools. The superintendents of these commissioned schools receive our graduates from the non-commissioned schools, and admit them to the senior year without examination. This fact alone is sufficient evidence of the high character of the work now done in our non-commissioned schools. Trustees of this county grant transfers to commissioned high schools, where graduates desire to finish the entire four years' course and enter the higher State institutions. This plan has practically brought the commissioned high school within the reach of every student in the county. This systematic promotion through the grades (graduating from "common branches"), passing through the work of non-commissioned school (graduating therefrom) and admitted to the senior year of commissioned high school (without examination) has proven a very successful plan in Gibson County, and is destined to be productive of much good. Pupils in every township are planning to graduate from our commissioned schools, instead of being content with their graduation from the "common branches," or non-commissioned high schools.

The Young People's Reading Circle has proven a potent factor in the schools of this county. There are few districts in the county without books. These libraries range from a few books up to three hundred, and include many good books selected by teachers in addition to the books recommended by the Reading Circle Board. There are now 3,400 members and 6,260 books belonging to the various libraries throughout the county.

Every teacher of Gibson County is a member of the Teachers' Reading Circle, and its importance and usefulness can not be overestimated. Many of the teachers, including the writer, believe that the present State Course of Study should be revised so as to emphasize the subjects of reading, writing, arithmetic, spelling and language. Give us thoroughness in a few lines of work, rather than a smattering along many lines. Experience has taught us that common school graduates, well prepared on the above subjects, do much better than pupils with a broader scholarship, but superficial in the above essentials.

This criticism is offered from the standpoint of Gibson County, and is not intended in any spirit of dissatisfaction. We believe that the State Course of Staudy has had a remarkable influence in building up our schools, and we are in no sense hostile to it. The effectiveness of the compulsory education law might be increased in this county by giving that officer authority to take charge of any pupil found away from school

during school hours, unless said pupil could produce a written excuse for his absence. The excuse should be signed by both parent and teacher.

In the coming school year we hope to increase our number of graduates from the common and high schools, and create a desire on part of every grade pupil to complete our high school course.

We shall be able to experiment somewhat with the problem of school centralization and report success in our next letter.

At this date, September 22, 1902, our schools are all in session, and our prospects for a successful term were never more encouraging.

Respectfully,

JOHN T. BALLARD, County Superintendent.

GRANT COUNTY.

Marion, Ind., September 23, 1902.

Dear Sir--Pursuant to your request to write concerning the work we have been doing in our schools during the past two years, and what we expect to do or would like to see done in the next two, I very cheerfully submit the following:

I felt somewhat reluctant about writing this, as most of such writings seem to partake of the nature of a boast, and such a thing is always distasteful to me. It is difficult to state the plain facts without doing it at the expense of seeming to boast of what you have done.

We have, during the past two years, been trying to keep step with the educational advancement as nearly as we have been able to do. We have tried to find out what others are doing, and then use what we consider the best of that. We believe that high grade work is done only when we have high grade teachers, and acting according to that belief we have tried to get the best we could. We think there has been a perceptible advancement in our teachers during the past few years. Good teachers are gotten and kept only by paying them well, and there has quite an advancement in this line.

The schoolhouses have been made beautiful on the inside, and the grounds and outhouses have been improved. The schoolhouses that have been built are considered modern, artistic and sanitary. Much supplementary reading has been placed in the schools, and the children are becoming greater readers. It is a common thing to find schoolboys and girls who read from forty to fifty books a year. We have been putting forth a special effort to improve the writing and spelling. I find the work in English to be the weakest, but it is gradually becoming better.

We have this year twenty-three beginning teachers in the county. There are 300 teachers in all. The beginning teachers will meet here next Friday and spend the day in visiting schools in the city, at which time methods and devices will be discussed wth them. We have done this before, and have found it to be very beneficial. Strengthen your beginning teachers each year, and it will not be long until you will have a strong corps of teachers.

I have done all I could get to get the trustees interested in their work, and whether it be I or not who did it, they are very much interested in their work. There is no way that you can do more for your schools than by keeping the trustees interested in the work. It is they upon whom you

have to depend for nearly everything that you do. For the good of the schools there must be absolute harmony between the trustees and the county superintendent.

If permitted, I shall pursue the same general plans during the next two years that I have in the past. I do not hope for nor wish any great innovations, but for a steady and constant growth.

Sincerely yours,

A. B. THOMPSON, County Superintendent.

GREENE COUNTY.

Bloomfield, Ind., September 1, 1902.

Dear Sir—There has been nothing magical in the progress of Greene County schools in the past two years, yet I believe the educational growth has kept even pace with the material advancement.

Most of our new schoolhouses erected are modern. In architecture much attention has been given to lighting, heating and beautifying, and generally the frame house has given way to brick. In several townships the enlarging of school grounds, and in all the planting of trees, has added beauty and created a better school spirit.

In school work I think we are nearest high tide along the line of supplemental reading. Last year Prof. George Bass, distributing agent for the Y. P. R. C., said, as far as his records would show, we stood first in the State as to the number of these books put in the schools. Our teachers are interested in this work, and to encourage them, 5 per cent. of item 7 in the last item, in making success grade, is based upon the Y. P. R. C. book or other books equivalent. When any teacher fails to get the books in a certain time, the county superintendent is notified, and the superintendent and teacher call a citizens' meeting, and a general educational program is carried out, and as yet has never failed to get the books at once, or in a short time.

The increased interest in graduating from the common schools has been marked in the last two years. We now have about two hundred each year. This interest is furthered by prizes and contests of honor as to scholarship and speaking at commencements.

The greatest impediment to the progress of education here, as I see it, is, first, often the lack of school books, because of the system of handling them; second, the selection of school officers, because they are good "runners," rather than being suited for the office.

Very truly,

HARVEY E. CUSHMAN, County Superintendent.

HAMILTON COUNTY.

Noblesville, Ind., September 1, 1902.

Dear Sir—Hamilton County was organized into a county in 1823, and was divided into nine civil townships. The early settlers were interested in schools, and very early started the work by erecting log houses and employing teachers by donations and subscriptions, and in several places had schools of various kinds with some success. But little progress was made in the way of a general school interest in this county until after

the adoption of the present constitution. Then parents realized that public schools in Indiana were to be a success. From 1852 to 1860 houses were built all over the county. The rule of location was to begin one mile from the east line and one mile from the north line and locate number 1. Two miles west was number 2, and so on to the west side. Then drop south two miles and start another row, and so locate a house in the center of every district, that was just two miles square. This county had its roads all on section and half section lines.

There was no attention given to any work outside of the common branches, and the term of school was usually three months or sixty days. Every pupil was expected to begin at the first of the book each year and go as near through as possible, and continue in school until he was 21 years old. About the year 1856 parents asked for longer terms, and we had 100 days school in most townships, and in 1873, with the new idea of county supervision by a county superintendent and the township institute, teachers and officers organized the educational work into a county and township system, and our schools took a new life and the work advanced rapidly. Our terms were longer and some high school work was done.

As railroads and towns appeared, new business centers came and schoolhouses were built. Good roads came and high schools were organized. A number of our teachers went to normal schools and a few went to college. Our plan started itself, and that is fewer and better schools, with trained teachers, in well-furnished buildings. The one-roomed district school has about filled its mission. With our present tendencies, we are to have a good building with all modern methods of heat, light, ventilation and all pedagogical appliances, and then have a corps of trained teachers directing our pupils through common and high school, ready for college or professional training.

Under the old district plan we had school with a small attendance, but nearly all grades, from the primary to the eighth grade and teachers, were so crowded with work that pupils did not have the attention and help that they should have, and the expense of furnishing supplies, fuel and pay to teacher was as much or more than the per capita cost in schools that were doing much better work under the graded school plan. By concentration we save much expense in the way of supplies and fuel. Then, by concentration, instead of having five teachers with 100 pupils, we have three teachers teaching the hundred, with much better results and at a great saving of expense. This will enable us to put a high school in the reach of every pupil in our county, and at no more expense than we now have. To illustrate, we had one township with sixteen district schools with an enrollment of 500 pupils. Now we have three graded schools with three teachers at each building, and one high school with six teachers in the building, making a total of fifteen teachers and giving every pupil in the township access to a commissioned high school.

What we need is for our trustees to have legal power to so plan our schools that we may have graded and high schools, and at no more expense than is necessary. The township trustee should have the legal power to so plan the schools of his township that he can have the most possible work done for the money. To compel a trustee to maintain a school of twelve or fifteen pupils when all could be better provided for in

another school, with better advantages and at less expenses, is not good management. No trustee should be restricted in the management of the educational affairs of his township by the indirect results of a political party, which has selected two or three men to object to any advancing step a trustee may wish to make in favor of good schools or a plan that will save expense. Oour plan should be to so arrange our schools that the work will be better and the expense less.

Yours truly,

E. A. HUTCHENS, County Superintendent.

HANCOCK COUNTY.

Greenfield, Ind., September 18, 1902.

Dear Sir—The schools of Hancock County have endeavored to keep pace with the increasing progress which has characterized the educational affairs of the State during the past few years. In my work in this direction as county superintendent, I have had the hearty co-operation of trustees and teachers, and the encouragement of many citizens. By our mutual efforts we have succeeded in giving greater unity to our school work than was possible before, and are reaping our reward in better educational advantages for our children. We now have township schools in every township except one, doing three years' high school work in addition to work in all the common school grades. Each of these schools is made the center of the educational interests of its township, and to them are sent not only the graduates from the common schools, but, in most cases, such common school pupils of the upper grades as can not find advantageous classification in the district schools. These township schools are in charge of competent teachers, who act as township principals, keeping in communication with the county superintendent's office in all matters pertaining to the general interest of the schools in their respective townships. These township high schools (non-commissioned) have a uniform course of study and uniform text-books, adopted by the County Board of Education. Pupils graduating from these township high schools, who desire to take the fourth year work, are transferred to any one of the three commissioned schools of the county. Uniformity in course of study and text-books extends, practically, to these commissioned schools.

One good result of this organization has been a more regular attendance and a longer continuance of pupils in the district schools. This is especially noticeable among the boys of the country, who, before, were inclined to drop out of school toward the close of the eighth year's work without graduation. It has also greatly increased the attendance in the fourth year of the commissioned schools.

This organization was partially effected four years ago, and since that time the growth of the township schools has been rapid. Some of them which began in houses of but two rooms, are now in well-appointed buildings of from four to six rooms. It has also done much toward consolidation of schools, as the township schools are gradually drawing to themselves the pupils of the adjacent districts, and already several small

schools have been abandoned, not only with the consent but at the solicitation of patrons. As an instance: one of the township schools began four years ago in a building of two rooms and with two teachers. Twice in that time the building has been enlarged, and now it occupies a handsome building of six rooms and employs six teachers.

There also has been great improvement in the district schoolhouses of this county. Old frame buildings have disappeared, and brick houses of approved architecture have taken their places. Within the time above mentioned there have been erected or enlarged by important additions nine district and nine graded and high school buildings. This list does not include any of those built to replace houses destroyed by the storm hereafter mentioned. None of these houses, with possibly two exceptions, has been erected where the number of pupils did not justify it.

Within the same time we have had more than our share of misfortune, so far as our school buildings are concerned. We have lost five houses by fire. These, however, have been either replaced or are now in course of erection; and in every case the new building is much better than the one destroyed. Our greatest misfortune, however, happened this summer, when the cyclone, which swept across the northern part of our county, totally destroyed six school buildings and damaged several others. But the work of rebuilding is already in progress, and even this misfortune may result in good, as it will lead to consolidation in some cases. The work of consolidation is progressing slowly, but, I hope, surely. What we most lack is an organized plan of transportation. Most, if not all, of our trustees would gladly get rid of their unprofitable small schools, but there is here, as doubtless elsewhere, opposition from patrons. I believe, however, that this opposition is becoming less, through the object lesson of the township schools and the few schools already consolidated, and I feel assured that the time is not far distant when a majority of the patrons will recognize the beneficial results of concentration of pupils and division of labor among teachers.

Respectfully,

LEE O. HARRIS, County Superintendent.

HARRISON COUNTY.

Corydon, Ind., September 22, 1902.

Dear Sir: The schools in this county have been conducted along the lines pointed out in the Uniform Course of Study. Special attention has been given to the grading of schools, sanitary conditions and qualifications of the teacher. The schools are all graded, the sanitary conditions imporved, and the standard of teachers raised. Just a few years ago the majority of teachers had received no special training, but now almost all are receiving special training, and a number are graduates from the various training institutions of the State.

Effort has been made to bring about consolidation of the schools, but so far has failed, partially due to the bad roads. At present there are a number of free turnpikes being built, which will eventually help to bring about consolidation.

The present law of licensing teachers should be changed, and, if possible, all grading be done at the State Department.

Yours turly,
AMZI WEAVER, County Superintendent.

HENDRICKS COUNTY.

Danville, Ind., September 18, 1902.

Dear Sir—The school of Hendricks County are improving some each year, and I attribute it to better teaching. Our teachers understand the subjects taught better, and many have had professional training. The result is a better spirit injected into the work. Seventy-five per cent. of our teachers attend one or more terms at some good school each year to improve their teaching ability. The increased demands and requirements that the public is exacting upon the teacher is much in advance of their wages. Hence, higher wages per day should be paid, or the term in the township school should be lengthened to seven or eight months. Our best teachers are quitting the profession or getting positions in the city schools, leaving our township schools with inexperienced teachers. Thirty per cent. of our teaching force are beginners. The tendency of patrons is to send their children to central graded schools, leaving the country districts with but few pupils, and our graded schools are being overcrowded. Many of our school premises are less than an acre, and a few but one-quarter acre. Ample room should be secured for the children of each school district for all kinds of play and sport; and their plays and sports should be looked after and directed by the teacher with as great care and interest as their study in schoolroom. Play is a great part in the development of childhood, and it should be under the direction of mature minds—some one directly interested in child-growth.

Many of the districts have children's library or Y. P. R. C., and books are added each years. And no other fact has been more pleasing to me than these libraries. It places within the reach of every child within the county the best reading published, with a cost of but a few cents per pupil.

We have eleven township high schools—nine doing three years' work, one four, and one two. In the last few years the high school work has had a marked change for the better. The enrollment has increased each year, and apparatus is being supplied for the better equipment of the schools. Our high school teachers are fitting themselves for more efficient teaching. They have perfected a County High School Association, which meets at regular intervals to discuss and council as to the best means and ways of the schools of the county.

Yours truly,
JAMES D. HOSTETTER, County Superintendent.

HENRY COUNTY.

New Castle, Ind., September 22, 1902.

Dear Sir—During the past two years there has been a general awakening of the people upon educational affairs in Henry County in two directions. First, it has become pretty well understood that since our common schools are organized into eight grades, no one teacher can take a district school and adequately care for all the grades that may appear from year to year. So, in many localities they have acquiesced to the abandonment of some of the districts, and the consolidation of two or more districts into one school of two or more teachers, who can always care for all the grades. Much careful and discreet execution may yet be done in this line.

Second, there is a feeling among the people that while all that is given in the present common school course of study is good, some of the work is not as good or practical as might be given. So far toward the side of praticality have the people's ideas turned, that it will soon be a comparatively easy matter to introduce far more manual work in the common schools of the county, and some plans are already formulated in that direction, which should be carried out in the next two or three years. The truancy law is meeting some opposition, but is steadily being enforced.

The township high schools are a fixture with us. We are studying the practical things that can be introduced into the high school course to compel its endorsement by the people, and at the same time be helpful to the students. A higher standard for graduation from the common schools has been tried and meets the approval of the people.

Respectfully,

J. A. GREENSTREET, County Superintendent.

HOWARD COUNTY.

Kokomo, Ind., August 15, 1902.

Dear Sir—The school officials and teachers of Howard County have been making extra efforts to place the schools of the county second to none in the State. We are fortunate in having a County Board of Education composed of men who are deeply interested in the cause of education. The trustees meet regularly on the first Monday of each month, and generally discuss one or two school subjects at each meeting.

We have not had to contend with the small school so much in this county as in some; however, a few schools have been abandoned. This year three schools will be abandoned, and free transportation furnished. There will be four wagons transporting pupils this year.

Most of our teachers have seen to it that preparation for teaching has been made. All but a few have had some professional training. They are thus becoming more proficient in the class work. Great interest is being taken in the county and township institute work. During the past two years the township institute work was conducted principally by means of the quiz. Probably the work has not been brought as close to the actual

school room work as it should have been, but we expect to make the relation closer than ever. This year the forenoon will be devoted to the discussion of the Teachers' Reading Circle work, and the afternoon will be devoted to discussion by all of the teachers of practical schoolroom questions. A great many questions were submitted by school officials and teachers. These will receive careful attention during the year, and other questions will be submitted by means of the question box. We are confident that more good is derived from the township institute than from any others teachers' organization in the State.

We are attempting to make the county institute a power for good. Instructors are secured whose influence is felt in the school and in the home as well. We attempt to make the institute interesting and profitable to the citizens in general. One subject of great interest and importance to everybody that is receiving special attention in the county institute, from which it will be carried to the school and the home, is nature study. In the fall of 1900 we secured the services of Dr. C. F. Hodge, of Clarke University, author of "Nature Study and Life." He gave us a good week's work on the common things of nature about us, and showed the great benefit that man may derive from them if he will only let them be his servants. Mention will be made of but one of the many things upon which he dwelt, viz., "Our Common Birds." He gave us so many helpful facts and left an inspiration that will never lose its effect. The simple facts that the wilds birds of Indiana have decreased 66 per cent. within the last fifteen years, and that if every wild bird were destroyed at once, within three years there would probably be a noxious insect for every square inch of surface in the United States, gave us food for careful thought. This work has been carried into the schools, and the pupils have become quite enthusiastic in it. Many bird-houses were erected by the boys of the country and city, and many boys and girls gave attention to flower culture. Dr. Hodge will be with us again this year, and we expect to push the work such that it will have a lasting effect. We are confident that a great moral uplift and financial benefit is derived from this work in nature study.

The attendance of the pupils has been considered good. Most of the corporations showed a better school attendance last year than for the year before. The compulsory educational law has been observed fairly well. Only one parental prosecution was made last year. The case was won by the prosecution. One boy was declared a confirmed truant and taken before the Circuit Court. He was let go on suspended sentence, but there was no occasion to have him committed, for the mere arraignment before the court had the desired effect. We expect to have the truant officer to do a little more effective work this year. He will visit each district within the first two months of school, and endeavor to keep in closer touch with all of the schools of the county.

Most of the schoolhouses of the county are good, substantial, brick buildings. Most of the new houses have been equipped with modern heating and ventilating systems. The interiors of many of the older houses have received the touch of the decorator. Trustees were unable to make many desired improvements, because of a shortage of special school funds. Further improvements will be made as the money comes to hand.

In the school room work, one of the things to receive special attention during the coming school year will be the general form work of the pupils. Too many pupils (and teachers, too,) are poor writers and poor spellers, and are deficient in neatness and accuracy. Steps will be taken to secure improvement in this particular line of work. While it is not considered that the school must fit the pupil in every way for the world of activity, yet there should be no necessity for him to attend a business college to secure some things that the public school should give him.

Yours truly,

E. E. ROBEY, County Superintendent.

HUNTINGTON COUNTY.

Huntington, Ind., September 22, 1902.

Dear Sir—In reply to your request to set forth the conditions of the schools of Huntington County, I beg leave to submit the following:

Huntington County is 16 by 24 miles in extent. With few exceptions, good gravel roads. We have twelve townships, eight of which the civil and the congressional townships are identical, and four townships that are but 4 by 6 miles. The county is generally level, except along the Wabash and Salamonie Rivers, where the country is somewhat broken. From this one can see that the physical features of Huntington County are such that one may easily reach any part of the county from the county seat, Huntington, which is but three miles north of the center of the county, thus making the schools easily accessible by the school officials.

There are ninety-nine district schoolhouses in the county, ninety-six being brick, and three frame. While about fifty per cent. are yet of the old square style, they are comfortable. Seven of the townships have a township high school house, and one township has two high school houses. Clear Creek Township has just completed a six-room school house, with a hall, that has a seating capacity of about four hundred. This house is in a rural district, in the center of the township. The enrollment in the high school at present is fifty-four. The heating and ventilating systems are of the most modern improvements. Union Township will add two rooms and a school hall to their two-room high school building next year. This will be modern in every respect. Jackson Township and the town of Roanoke are building an eight-room school building, in which they hold their high school jointly. We will probably ask for a commission for this school this year.

The county superintendents for at least twenty-three years have prepared courses of study until about ten years ago. Mr. M. B. Stults prepared the first course in 1879, each of the following county superintendents in turn revising the course of study—E. A. McNally, A. D. Mohler and Oliver Cline. Mr. Cline, with Mr. Sandison, prepared a very complete manual, embodying about all that the present State Manual contains. Mr. J. A. DeArmitt, my predecessor, about ten years ago, with the County Board of Education, adopted the State Manual, since which time it has been used.

The course of study at first was followed somewhat to the letter. Our

aim has been to push the welfare of the pupils to the front and make the course of study serve the pupil, instead of the pupil the course of study.

So many subjects enter into the course of study that the young teachers, and some older ones, become somewhat bewildered at the amount of work to be done. One of the lines of progress for the past two years has been to see that all the different subjects outlined for one year's work are not to be given the same amount of time; that is, to place emphasis on some studies at one time and on others at other times. For instance, reading and language should be emphasized above all other studies for at least the first four or five years, when geography and arithmetic take equal rank. Beginning with the sixth year, probably, all subjects should be given about equal rank.

We are trying to get our children, even in lower grades, to appreciate the idea that they are going to school to work, and not to be merely entertained by the teacher. We believe that we can see some advancement in the pupils' work from working along this line. Again, some teachers do too much of the so-called concrete work. For illustration, they have a child spend too much of his time in doing work similar or much inferior to what Froedel would have the children from three to five years do. We do not wish to be understood as not believing in concrete or kindergarten methods of work, but we do want to be understood that our aim is to give the child work suitable to his age and advancement, so that they may not so frequently feel, as did "Dod" when he said to his teacher, "I allers knowed that." We shall continue to work along this line, thus having the pupils from the beginning to feel that they are really little men and women, and that they are indeed living.

We can see a greater growth in the township high schools than in the common schools, probably because they have been more recently founded. We have four years' course in our township high schools. Seven out of the nine township high schools have but one teacher in the high school; this, of course, makes too much work for one teacher. We obviate this to a certain extent by combining the classes so that the teacher does not have more than three years of high school work. Even this seems absurd when we compare it to the city high schools having from eight to twenty teachers, but we are very well satisfied with the results that we are getting. Two of the schools have two teachers in the high school. In our township high schools the science side of the work is heavy and the Latin and German light. This, we believe, is a greater advantage to the large majority of pupils who attend these schools.

We believe that one of the greatest aids toward the working out of the best in education in Huntington County lies in the fact that the town superintendents, city superintendent and county superintendent are all working together as a unit for the highest educational advancement. We are one in school work.

School officers and teachers are fully realizing that example is one of the greatest factors in the formation of character, and are working to set only the best before the children. We believe in positive, rather than in negative, education.

Yours very truly,

H. D. SHIDELER, County Superintendent.

JACKSON COUNTY.

Brownstown, Ind., September 15, 1902.

Dear Sir—The schools of Jackson County have made considerable progress in the last two years. The teachers are much better prepared, both in scholarship and professional ability. While there has been a good, wholesome growth along these lines, yet there is room for greater advancement, and we shall emphasize these points, for the success of the schools depend upon the improvement of the teachers.

The enumeration has decreased for the last three or four years, yet the average daily attendance has increased. This may be attributed to a better classification and gradation, better trained teachers, together with a more stringent enforcement of the compulsory education law.

There have been very few buildings erected in this county in the last two years. We have more schools than are necessary for the number of pupils; but the houses that have been built are constructed on the modern plan. We advocate the policy of building as few as possible, unless they be centrally located and so arranged that additions may be made, as centralization and consolidation demands.

Four of the district schools have been conveyed to graded schools within the past two years. This year two more will be conveyed to graded schools and four district schools consolidated into two. The trustees and school officers are favorable to consolidation, but it is difficult to get patrons to consent to this change of affairs. We believe the sentiment for centralization is growing, and we hope the time is not far distant when the schools of Jackson County will be consolidated.

There are nine township high schools, beside two incorporated towns and one city high school. The township high school course consists of three years of six months each, and comprises the following branches: Algebra, literature, composition, general history, civil government, physical geography, plane geometry and Latin. This course is intended to cover the first two years of the commissioned high school, that the graduates may enter the junior year without interruption and complete the course in town years. The county has adopted high school books, which have met with favor and been quite a saving to the patrons. A two-years' course might be better than three, as the classes would be larger and more complete the course.

The County Board of Education requires the teachers to pass the examination in music, and that it be taught the ensuing year. While the subject was presented before, yet there was not the interest manifested that should have been.

More attention has been given to sanitation and decoration than ever before. The houses are cleaned, fumigated and better kept than formerly. And school officials have become more interested in this subject.

Teachers have not only made it a study, but put it into practice, and as a result most all of the schoolhouses in the county are neatly and plainly decorated.

Arbor Day has been observed by the majority of the schools. Owing to lack of care during vacation, many of the trees have been destroyed. The directors should see that the grounds, as well as the buildings, receive proper attention.

There has been considerable interest taken in the Young People's Reading Circle and it has wrought a great good in the schools of this county. In 1900 there were 949 members; in 1902 there were 1,506 members. The books have been secured by the pupils, teachers and trustees, but we suggest the books be purchased by the trustees, as the expense will be more equally distributed.

The minimum wage law has been an incentive to better scholarship. Fully 50 per cent. of the teachers of this county attended school this year.

One of the greatest needs of Jackson County is sufficient funds to run a six months' term in all the townships. One of our townships, with the levy up to the limit, will not have more than four months' school this year. We believe the State levy should be sufficient to give a six months' school to every township. This would raise the State tax, but the State should support her own schools, and is able to do so.

Our policy has been to follow the instructions of the State Department, and adhere closely to the course of study, to elevate the schools by creating a healthy school sentiment among the teachers, patrons and school officials, to inspire the teachers to a higher standard of scholarship, for upon this depends the educational progress.

Very respectfully,

J. E. PAYNE, County Superintendent.

JASPER COUNTY.

Rensselaer, Ind., September 16, 1902.

Dear Sir—In answer to your letter in reference to the schools of the county, I beg to submit the following:

Our last two county institutes have been the very best we have ever held. The attendance has been perfect, and the interest taken by teachers has resulted in the doing of much better work in the schools. This is due largely to the law giving teachers wages for their attendance. The law regulating teachers' wages has done much for the schools of this county. More of our teachers are attending professional schools and preparing themselves to do better work.

Our trustees are giving much more time and attention to the school work. They attend the county and township institutes, visit their schools as often as possible, and are giving more attention to the school buildings and yards. Our schoolhouses are being put in better condition, and in the yards beautiful trees are planted and carefully tended. We have at most of our schools deep driven or bored wells, from which we get the very best of water.

The teachers of this county take a very great interest in the Young People's and Teachers' Reading Circles. Every teacher in the county is a member of the Teachers' Reading Circle. The books of the Young People's Reading Circle are in nearly every school of the county. They are enjoyed by pupils, patrons and teachers. This is one of the very best forces for good in the county.

The teachers of this county are very much interested in the subject of music. There is an attempt to teach this subject in every school in the

county. The result has been that the people of the county are becoming very much interested in the subject and are asking that there be a supervisor of music appointed for each corporation. Music has done much to make our schools brighter and happier.

The law providing free tuition in high schools for pupils who have graduated from the district schools has worked well in this county. It has stimulated the district pupils in their work, and a very large per cent. of our eighth year pupils graduate and enter the high schools of the county. It has discouraged the attendance of pupils in the districts after they have completed the work. They are willing in most cases to enter and finish the high school work before attempting to teach or to enter professions or pursuits. Pupils no longer think that their education is completed when they have graduated from the common schools. We have not attempted to maintain township high schools. We feel that the work can not be as well done as in the well-equipped high schools of our city and towns. We no longer attempt or allow teachers in the ungraded schools to do high school work. This can not be done without injuring the grade work.

There is a growing sentiment in this county in favor of discontinuing small schools. In quite a number of cases this has been tried and has been fairly satisfactory. Our county is not yet ready to do much with the consolidation of schools. Our bad roads are a barrier.

The truancy law has been a good thing for this county. Many boys and girls have been in school who otherwise would have been kept out. It has cost the county very little to enforce the law, and the good done has been very great. Our truant officer is very efficient, and has been very reasonable in the matter of expense. We still find it a little difficult to get the proper reports promptly.

We are striving in this county to raise the standard of teachers. We would like for our teachers to have more professional training and better scholarship. Of the one hundred and forty odd teachers of the county, some thirty-five enter the work each year for the first time. These beginners are for the most part high school graduates, but they have no professional training whatever. Too many of our very best teachers drop out of the work each year. Our trustees are anxious to secure the very best teachers possible. It is, however, impossible at this time to secure teachers who have had professional training. Our city and town schools secure these. We feel that we will be able to get teachers with the proper training and scholarship when the districts offer the same advantages as the town and city schools, viz., longer terms and better wages. Another thing that will help the profession will be the location in Northern Indiana of a State Normal School.

Some changes should be made in the supervision of the district schools. The county should be divided in three districts, with a district principal in each, working with and under the direction of the county superintendent. This principal should take charge of the township institutes in his district. There should be no examination of teachers while the schools of the county are in session. It would be an excellent thing if the State would take full control of the county institutes. There should be employed five or six eminent educators, whose duty it would be to hold a county institute

in each county of the State once each year. These instructors could devote their entire time to the educational interests of the State. They could visit each county, going into the schools of the towns, cities and districts. Their work done in the institutes should be based on the work they have observed. They would be able to make recommendation to the State Superintendent and to the Legislature. They would be able to advise with and direct the work of the county and city superintendents of the State. Our institute instructors now are so little acquainted with the school work of the counties in which they lecture that much of the good they should do is lost.

The Legislature should pass a law in reference to the building of new schoolhouses. It should provide that they were properly constructed, both as to sanitation and as to efficiency and beauty.

We believe that the schools of Jasper can be improved by—

1. Requiring teachers to have professional training and a high grade of scholarship.
2. By establishing a Northern Indiana Normal School.
3. By making music a required study and providing for its supervision.
4. Have State institute instructors.
5. By State regulation of the erection of schoolhouses.
6. By improving the supervision of district schools.
7. By grading teachers' wages for service as well as scholarship.
8. By lengthening the school term in districts.

Yours very truly,

LOUIS H. HAMILTON, County Superintendent.

JEFFERSON COUNTY.

Madison, Indiana, Sept. 15, 1902.

Dear Sir—In compliance with your request of recent date, I have the honor to submit the following:

The past two years have been marked by substantial progress in almost every department of educational work. Recognizing that under any system of supervision the teacher is the most important factor in school work, increased attention has been given to securing and retaining those teachers who, by nature and training, have shown special fitness for the work. To this end, a reasonable certainty of tenure of position, dependent entirely upon satisfactory work has been established. The personnel of the teaching force has been improved, and the teaching has certainly become more rational and intelligent, and characterized by greater interest and vitality. The latter is largely due to the better professional training of teachers, a larger number of whom each year are attending the leading normal schools and other schools of higher instruction. I would especially note the improvement in classification and gradation, which has naturally resulted in more thorough and systematic work. Particular stress has been laid upon the daily preparation of the teacher, and a persistent effort made to follow the Outlined Course of Study. The discipline in the schools is effective, yet not harsh.

The school attendance, barring the effect of epidemic diseases, has been good. This is due, in part to the operation of the compulsory education law, although there have been very few obstinate cases of truancy outside of the city of Madison. In general, artificial devices to secure better attendance have not been resorted to, but a strong endeavor has been made to maintain schools that should be well worth attending, and to create and foster a better school sentiment among the patrons.

In administering school affairs, the policy pursued has been as liberal and progressive as the means would command. However, in the effort to become adjusted to the requirements of recent school legislation, some phases of the work have been temporarily affected and weakened. In some school corporations, even with a levy of 35 cents on the $100, the funds have fallen far short of the requirements of the teachers' wage law, and in nearly all a constant struggle is maintained by the trustees in their efforts to comply with the law on the one hand, and to avoid plunging their corporations into hopeless indebtedness on the other. The maintaining of the local rate for tuition at the extreme limit has resulted in a lower rate for special school purposes than would otherwise obtain, and, as a consequence, the amount raised and expended upon buildings, repairs and equipment has been little more than necessity required. Only two buildings have been erected during the past two years, but these are models in their way, of convenience and sanitary arrangement. Many of the schoolhouses in this county are old, and lacking in proper sanitary arrangements; however, all are comfortable, and nearly all have been made more cheerful and attractive. Under present conditions, the apparent remedy lies in the centralization of schools. But even in this, many difficulties yet confront us. In some sections of the county, the topography of the country is such as to render very difficult the transportation of pupils in any large numbers. In others, bad roads during the winter season have been the chief impediment. As these are now being rapidly improved, it is expected that a new impetus will be given to the movement towards centralization. Careful estimates have shown that three-fourths of the teaching force now employed in the country districts could easily do the work required, to say nothing of the advantages to be gained in attending graded schools, centrally located. A beginning has been made. In Republican Township, last year, one school was closed, and the pupils transported by hack line to the town of Kent. In Monroe Township, two small schools were closed and the pupils sent to other schools. Madison Township will close two schools this year. These arrangements will continue indefinitely. The trustees are alive to the situation, and ready to adopt any feasible plans by which more can be accomplished in this direction, but for reasons above cited the process of centralizing the schools in this county will necessarily be slow.

In the way of apparatus and general equipment, the schools are fairly well supplied. More works of general reference are needed in many schools, but are being supplied as fast as the funds will admit. Of the 119 schools outside the city of Madison, 116 have the Young People's Reading Circle Libraries. These libraries have become most valuable auxiliaries to the regular school work, and have aided greatly in popularizing the schools.

As to my present policy and plans, I can only say that I am attempting to make the school work as strong and symmetrical as possible, not so much by strengthening the weak places when they appear, as by discovering and correcting what many seem to be wrong tendencies in any direction. Among special lines of effort to which our attention will be directed anew, in the immediate future, may be mentioned the following: First, the bringing of the schools more closely to the people. All proper means will be used to induce more of the patrons to visit their respective schools and see what is being done for the pupils, thus bringing pupils, teachers and patrons into closer relationship. In connection with this, the general public will be invited to attend the township institute meetings, and participate in the discussion of the more practical subjects on the program Second, we shall also try to put into operation more fully the plan of visitation, by which the teachers of a corporation may visit the school of one of their number at designated times, and discuss the result of their observation at round table meetings at the close of the day's work. It is believed that in these ways the spirit of harmony and co-operation may be increased, and that much practical good may result in the way of upbuilding the schools of the county.

Very respectfully,

G. S. TAYLOR, County Superintendent.

JENNINGS COUNTY.

Vernon, Ind., September 9, 1902.

Dear Sir—We feel that Jennings County has made progress in matters of education the past two or three years in all respects, and especially along the following lines:

1. Schoolhouse Architecture and Schoolroom Decoration.—Since June, 1900, five contracts have been left for building houses—three township graded high school buildings and two one-room county schoolhouses. All of these are modern and sanitary, four of them built under inspection and approval of State Board of Health. While meeting with more or less opposition at time of contracting, we find that patrons, teachers and trustees express entire satisfaction after buildings are complete and results seen. There is no doubt that the sentiment in favor of sanitary houses is so strong that in the future only the best will be built.

Teachers are interested, not only in decoration, but in the best kind of decoration. The art exhibit (Soule Art Company, Boston) at last county institute met the greatest need in this respect, and is resulting in the proper study and appreciation of what is best for home and school decoration. We value this interest, not so much for the pictures it puts in the home and the school, but for the awakening in this phase of education.

2. Special effort has been made to improve the quality of work in the township high schools. Six townships have high schools, and ten townships of the eleven either have schools or have access to adjoining corporations. The sentiment is very strong, and at least 80 per cent. of all common school graduates do high school work. In three of the townships, four-year courses are given, because of strong demand. Our plan is to

extend the study of subjects already begun, thus resulting in a thorough knowledge of completed subjects, rather than a smattering of many uncompleted subjects.

3. We have made progress in Young People's Reading Circle work. Not so much in number of books and extension of libraries, as in quality of the reading. Every school in the county has a library. The interest in good books and good reading, both among pupils and patrons, is encouraging.

Very respectfully,
M. W. DEPUTY, County Superintendent.

JOHNSON COUNTY.

Franklin, Ind., September 20, 1902.

Dear Sir—We have ninety-five schools doing work in the common branches, or common school work. The enrollment in these schools last year was 2,762, making a little more than twenty-nine to a school. The average daily attendance for each school was twenty-one. There were 102 graduated from these schools last year. Special effort has been made to increase the efficiency of the schools along all lines, and I believe they are better organized and doing more effective work than ever before, yet I am convinced that our common, or district, schools are not accomplishing all they should; there are too many failures on examination for graduation. Our schools should be so organized and the instruction so efficient that at least 90 per cent. of the pupils will be able to graduate at the close of the eighth year, and that failure to pass would be an exception, rather than so common. I believe that such a state of affairs could be realized. I think our common schools should not only prepare the pupil for the high school, but should give him proper habits of work and living and equip him to some extent for the practical affairs of life.

Township High Schools.—Johnson County has nine townships. Seven have high schools. The first established, and among the first in the State, being Nineveh schools, in Nineveh Township; Hopewell, in Franklin Township; Trafalgar, in Hensley Township; Whiteland, in Pleasant Township, and Center Grove, in White River Township. Those more recently established are Providence school, in Union Township, and the high school in Clark Township. A site has been chosen and preparations are being made for the erection of a high school building in Needham Township. This will place a high school in every township. (Blue River Township transfers to Edinburg.) A good deal of objection on the part of some taxpayers was raised to the establishment of these schools at first, but none can be found now where these schools have been established. These seven schools enrolled last year 173 pupils, making an average of twenty-four to the school, and graduated twenty-nine. From the beginning the work done in these schools has been of a high character. Each maintains a four-years' course, based on the course outlined by the State Department for commissioned schools. Such changes from this course are made to apply to local conditions only. The course is made uniform for all the schools, with uniform text-books.

We have as principals men who are experienced teachers, and most of them college graduates. Two of the schools—Ninevah and Whiteland—have assistant principals, who do some high school work in connection with seventh and eighth grade work.

The Teachers.—There is much truth in the old saying, "As the teacher, so the school." It follows then that the best way to improve the school is to improve the teacher. The following will give an idea as to the academic preparation of our teachers. Of the 102 teachers last year, sixty-five are graduates of high schools that maintain a four-years' course. Several of this number are also college graduates, and with but few exceptions the others have taken some work in college or normal schools. The remaining thirty-seven include our older teachers, who have not had the advantage of a high school course, but who have taken some work in normal schools and colleges, and with experience have become strong teachers. Of the seventeen who taught for the first time last year, all were graduates of high schools, and fifteen of these had made some special preparation beyond the high school. It is evident that the time has passed in this county when a common school graduate is considered qualified to take charge of a district school. Our school officers are insisting that their teachers make special preparation for their work, and that they must have some professional training.

School Sentiment.—One thing that adds materially to the success of the schools is a good school sentiment. This we have in Johnson County, and to encourage this the patrons should become acquainted with the work that is being done, and be brought in contact with the schools. Our township commencements do this to some extent. Our graduates represent most of the districts in the township, and at our commencements a large number of patrons are brought together to witness the exercises. We also have a county contest in declamation. The graduate who wins the honors in the township commencement represents his township in the county contest. This brings together a large number of patrons, also. Of course, there are other good results from this, aside from arousing an interest in school work. I believe in the township commencement, in which the graduates speak, and in the county contest.

School Consolidation.—But very little has been done in this county toward consolidation of schools. This year one district has been abandoned, the pupils going to other districts. Free transportation of pupils has never been given here. Trustees are not giving transfers unless necessary, and are encouraging pupils to attend the graded high school, which will help the cause of consolidation. We have a half dozen other schools, with an average daily attendance of from five to ten pupils, that should be abandoned. I think that the tendency will be toward consolidation.

I have intentionally omitted any discussion of the schools, other than the township schools, as I inferred from your letter that I should. Suffice it to say, we have three excellent commissioned high schools at Greenwood, Franklin and Edinburg, and a college located in Franklin, to which many of our pupils go after completing their work in the township schools. Altogether, our pupils have splendid opportunity to get an education without leaving home.

Some Recommendations—That every applicant for a teacher's license be examined by the State Board of Education or a board selected for that

purpose, the county superintendent to hold the examination as at present, and furnish the grade of success of his teachers only.

That the school book law be amended so as to relieve the school officers from being made agents of school book companies, or compel the companies to pay a per cent. large enough to justify clerk hire.

That the number of truant officers be made sufficient in each county.

Yours truly,

GEORGE S. TAYLOR, County Superintendent.

KNOX COUNTY.

Vincennes, Ind., September 29, 1902.

Dear Sir—In answer to your request, I will try and give you a short and concise statement of the educational situation as it exists at present in our county and for the past two years.

At present we have a greater number of teachers, who have had special training for their work, than at any previous time in the history of the county. For the past eight years we have had from thirty-five to forty-five students each year in the State Normal School. We have also in that time had a fair representation in the State University. The result accruing from this training is manifesting itself in better teaching and a professional spirit among the teachers, which is bound to raise the standard of teachers and teaching.

One feature of which I wish to speak especially, and which is prevalent in our county, and that is the tendency of our best teachers to drop out of the profession and adopt the law, medicine, etc. I note a growing tendency in this direction, especially in the last two years. To my mind, this is the greatest menace to our schools we have to confront.

In the two years just passed there has been a decided improvement in the attendance in all of the schools of this county. I think this is due especially to two causes: First, there has come to the people generally a largely increased interest in education. Second, the operation of the compulsory attendance law has had the effect of bringing into the schools a large number who could not be reached in any other way. We are fortunate in having a very efficient truant officer, who performs his duty vigorously. I can not overestimate the good that is being accomplished by enforcement of this law.

At present we are building but few new schoolhouses in the districts. I am using my influence to prevent the trustees from investing money in schoolhouses outside of the towns and villages. The object of this is to make it easy in the future to abandon a great many of the districts in which school is maintained at present. In the towns and villages, where we have built houses the last two years, they are of the latest designs, and modern in every respect. In the town of Freelandville, two years ago, the township trustee erected a brick building at a cost of $13,000, with every modern improvement known to advanced architecture. In the town of Decker, the township trustee erected a frame structure at a cost of $5,000, which, likewise, embodies all of the latest improvements, special care being given to sanitation, light and heating.

In the consolidation of schools, we have as yet not made much progress. The chief cause for this is the fact that we have had clay roads in our county, and they become impassable in the winter and spring. These conditions are being removed now by the building of gravel and stone roads in five out of the ten townships in the county, with good prospects to have them in the remainder of the townships soon. We have abandoned two schools in Vincennes Township this year, and are hauling the pupils by contract, with satisfactory results to pupils, patrons and school officials. The cost of hauling is $1 per day, which is a large saving to the taxpayers. This is the beginning, and will be followed by other townships as soon as conditions will warrant. There is now a public sentiment growing favorable to this plan.

Yours truly,

PETER PHILLIPPI, County Superintendent.

KOSCIUSKO COUNTY.

Warsaw, Ind., September 1, 1902.

Dear Sir—Our aims in this county have been with teacher, school officer, pupil and parent. For the past two years we have been gradually raising the standard requirement for teacher's license, by asking a higher academic qualification, as well as a higher physical and moral requirement. No person who is not in perfect physical health and an abstainer from the use of all narcotics and stimulants should be licensed to lead the minds of our youth to higher ideals. Through the aid of the Teacher's Wage Law, we have been enabled to secure teachers who, we believe, will meet these requirements, and have raised the standard of the profession at least 30 per cent. There is also a feeling of greater responsibility resting with our teachers than ever before.

Our trustees are earnestly laboring to aid the teacher in securing a greater respect for the care of public property. Nearly all of our schoolhouses have been repainted, kalsomined or papered. They have also been thoroughly cleansed and renovated before the opening of school. The outbuildings are put in proper sanitary condition, and the grounds have been made attractive. A tubular well has been driven on the grounds of nearly every schoolhouse in the county. All of the new buildings that have been built within the last two years have been constructed on sanitary plans with basement and furnace.

A great many of the small schools have been abandoned, and the pupils conveyed to other schools near. We now have thirteen hacks transporting these pupils. The universal satisfaction this plan has given has encouraged trustees to try centralization as soon as the condition of the roads will warrant and new houses are needed.

We have organized high schools in every part of the county, and have adopted the Course of Study recommended by the State Board of Education, so that every pupil who graduates from the common schools may have an opportunity to attend one of these high schools. About 85 per cent. of them avail themselves of this opportunity and the majority complete the full course.

This county being large, much of the supervision is done by the trustees, who visit their schools monthly, and on the first Monday of each month meet in the superintendent's office to make a report of the condition of the schools and consult on the best methods of conducting them.

Although the reward system is not universally recommended, we have secured excellent results from the use of honor rolls. In 1900, we gave to each pupil who was neither absent nor tardy during the entire term, a roll of honor, using only 240. This year we used the same, and found 876 pupils who were present every day during the school year. Believing that the end justifies the means, we have this year adopted the "Official Punctuality Button," and will, on the first day of school, pin on every pupil one of these buttons, to be worn by him as long as he is neither tardy nor absent, and his conduct is commendable. If he should, for any cause, lose the button, he can try again at the beginning of the next month. These buttons are provided by the county from county funds.

Believing that the greatest need of the day is smypathy of the patron of the country school with the plan of education, we are inaugurating a plan of nature study, which will not only interest the pupil, but will give material for language study, and at the same time interest the parent in the school work and in the protection of his best friends.

As soon as he can be prepared for the work by observation and study we shall ask each pupil to write a complete history of the habits, development and usefulness of some plant, tree, bird or animal, native of the county. We shall also ask for the preparation of a specimen, if a tree or plant, by mounting on cardboard bud, leaf, flower, seed, a cross section and a longitudinal section of the body showing bark and grain of wood. These compositions and specimens will then be collected, and the best of each particular kind will be kept as a part or the county museum. We hope by this to interest parents, as well as pupils, and at the same time secure some valuable material for the museum.

Yours truly,

G. W. WORLEY, County Superintendent.

LAGRANGE COUNTY.

Lagrange, Ind., September 1, 1902.

Dear Sir -In response to your request to "discuss the progress made in the school affairs during the past and to forecast what should be done," the following is submitted for your consideration:

The chief educational movements of the past two years in Lagrange County have been those of more definite administration. The law creating free high schools has necessitated more clearly marked courses in our smaller township high schools and a uniform standard of credits. We have thus placed our non-commissioned schools on a two-year basis, with an exchange system of grading manuscripts in subject finals, resulting in such credits spread upon the books of the county superintendent's office. Then, as students graduate from these high schools and enter our commissioned schools on advance standing, they have definite and most acceptable reports of proper credits direct from the superintendent of the

county schools. The quality of the work has been greatly enhanced; the courses are held to the limit of thoroughness; the spirit of competition has been augmented, and all high schools have prospered. We are holding as closely as possible to the idea of issuing the common school diploma only as a legal paper entitling to high school admission, and 91 per cent. of all graduating from the grades last year entered the various township high schools.

We have instituted a well-marked method of collecting county institute fees and a mode of procedure for such institute, which has not only enabled us to open for the week at 8:50 a. m., Monday morning, with the teachers present, but has placed its finances on an excellent footing. All fees are checked, as well as hours of attendance, and we now have marked interest, continuous presence of teachers and most practicable instruction.

We are likewise overcoming a certain lack of enthusiasm so often characteristic of township institutes. We are opening and closing these sessions with the promptness of a school day, discussing subjects of interest to parents, and now, for the second year, have a schedule of joint institutes for the term, prepared by the county superintendent. These meetings are bringing parents and graded and high school pupils on our programs. Such an institute gives us a full house, better co-operation and fosters local educational spirit.

Certain other movements, influenced more or less by recent legislation, have been made in educational affairs in our county. Doubtless many counties felt that there was little need of a truancy law for them, but after such an enactment attention has been called to lack of educational interest on the part of some parents that were previously overlooked. So it was with Lagrange County. While our truant officer has been patient and fair, he has insisted on school attendance, and his work has had a visible effect upon the schools. Most of our prosecutions were made last year, and as they chanced to fall in different parts of the county, were the last contribution to our general respect for the law.

Our teaching force is becoming more and more interested in further educational training. A majority of our teachers attended some institution of learning during the vacation period of the year 1902.. Thus is our educational spirit enhanced. The increase of wages has enabled us to retain about an equal proportion of men in our schools as against the declining ratio of previous years.

Perhaps there is no administrative policy that has been of so great concern locally as the matter of consolidation. About 30 per cent. of the district schools of Lagrange county have been abandoned. The last two years have witnessed about half of these abandonments. The pupils are conveyed to the central school, of which we now have at least one in each township, the township of Clay, adjoining the town of Lagrange, excepted. Three new buildings of modern architecture and sanitation have been constructed in the past two years. The county superintendent has submitted blanks to parents of conveyed children for their opinions and suggestions on the system of transportation. Their general request is for improved vehicles, adapted in every way for such service. Some townships own the hacks and the trustee selects the driver, upon a price determined by the driver and the township; others have let the work to bidders, who furnish the conveyances. Our reports from those parents

whose children have been conveyed during the past two years, show 88 per cent. who approve of the centralization system. This year the County Board of Education has adopted a uniform contract for transportation, which more specifically fixes the driver's physical and moral responsibility toward the children in his charge. The trend of public sentiment is toward better enclosed rigs, with special provision for keeping warm. As we are now passing from the bidding system and individual ownership of hacks to better centralized schools, this problem of improved conveyance and better service is nearing a rapid solution.

A greater interest is manifested in common school graduation. Our pupils are finishing this elementary course at the approximate age of sixteen, a somewhat greater degree of maturity, and we have just closed a successful experiment of county graduation exercises. Centralization is an aid in thus holding a larger ideal of school life before the pupils. There is a general opinion that the "elementary school stands for the bread and meat of life," while the high school presents the pastry, which, with us, is perhaps half true and half false. Along with the enlarged opportunities which centralization is bringing to our grade pupils, a somewhat important change in our township high school courses is thus no remote possibility. These schools, while yielding to the regular preparatory demands of our university system, will be expected to meet the local conditions, as does the city system in its manual training and business courses. As the "university of the people," these graded and high schools situated amid nature's laboratory, are feeling greatly the need of acting upon the recent progressive thoughts so ably discussed in our National Educational Association, and presents a more practical and scientific study of the "three R's" before the graduates pass from their doors, and provide such equipment and instruction in chemical science and along agricultural lines as will more nearly meet the demands and environments of modern rural life. The progressive agriculturalist of today already possesses this knowledge and the generation of kindred calling, while not wanting in a broad culture, must feel the needs of so much of utilitarianism in the public school's contribution of life.

Very respectfully,
H. S. GILHAMS, County Superintendent.

LAKE COUNTY.

Crown Point, Ind., September 29, 1902.

Dear Sir—Your letter, asking for a statement of the progress made in the schools during the past two years received, and I beg leave to submit the following:

Two years ago many of the country schools were doing ninth and tenth year work in addition to the common branches, much to the detriment of the grades. This has all been done away with, and all graduates from the eighth grade are transferred to a commissioned high school.

Two years ago several town and township high schools had not been able to get commissions. They have all strengthened their course, and now all high schools are commissioned.

Two years ago Lake County had no gravel or stone roads. Today over two hundred miles of hard roads make the transporting of children possible. The consolidation begun last year is being extended, and small schools will be closed in at least eight schools in five townships this winter. This is but a beginning, from which we anticipate good results when the people have had a chance to test its merits.

Last year was the first that all teachers in the county took membership and did work in the Teachers' Reading Circle. The fact that town and city teachers were doing the work made the official management of the other teachers much easier.

Last year was the first that all corporations had put in a supply of Young People's Reading Circle books. This gave a new impetus and many more books were read than ever before. My experience leads me to the conclusion that when a trustee breaks into the habit of buying Reading Circle books he rarely abandons it. Therefore, we look for still better results next year.

We note an increase in the enumeration of 1,700 children. This shows a healthy growth, and naturally an increase of work for the county superintendent. Pay is the same.

The subject of sanitation has been given more attention. Better locations have been secured, and architects have had charge of construction of buildings of all classes. This insures better methods of ventilation, heating and light.

Decoration of rooms has had much attention, and at the County Association the principal talks were by Mrs. John B. Sherwood, of Chicago, on "Art in the Schoolroom." It had its effect, and a much better class of pictures adorn the walls and paints are of milder tints than formerly.

In this retrospective glance we see a general uplift in the schools, and believe they rank with the best in the State.

Respectfully submitted,
FRANK E. COOPER, County Superintendent.

LAPORTE COUNTY.

Laporte, Ind., July 24, 1902.

Dear Sir—Your letter of the 2d inst. received, and I take pleasure in writing you concerning the progress which has been made in Laporte County along the lines therein mentioned.

Under the efficient management of Charles A. Zeigler, who resigned June 6th of the present year, the schools of Laporte County have grown toward a better condition as a whole. Improvement in teaching has been secured by: (a) Better co-ordination of subjects. (b) Condensing daily program. (c) Better discipline, by physical, mental and moral training of pupils. (d) Broadening course of study with things essential to the child's complete living without increasing work.

Attendance: Greatly improved through operation of the Truancy Law.

Administration: (a) Closer supervision. (b) Greater uniformity of work in both common and high schools.

Centralization: (a) Has been tried in several townships and has proved to be eminently satisfactory where conditions as to roads, dis-

tance, and facilities for transportation have been favorable. (b) Union Mills, in Noble Township, is a notable example of sucessful consolidation.

Sanitation: (a) Conditions quite unsatisfactory; great opportunity for improvement. (b) A few good buildings have been built.

As to future policy, I am so new to the work that I am not familiar with all the plans of our board, nor have I outlined a definite policy of my own. We may be able to secure a uniform term of school throughout the county, improve sanitary conditions, raise the standard of teachers, and will endeavor to secure greater thoroughness in the teaching of all fundamentals.

Hoping that this report is as full and complete as you would wish, I remain, Your obedient servant,

E. G. BUNNELL, County Superintendent.

LAWRENCE COUNTY SCHOOLS.

Mitchell, Ind., Sept. 1, 1902.

Dear Sir—Lawrence County has just cause for being proud of her teaching force. Of course, there are a few drones and a few who are willing workers, but have sadly missed their calling, but a great majority of the teachers are awake to the responsibilities of their work. Many are striving to make teaching a profession, and are devoting their entire time to the teacher's work. Seventy-five per cent. of those who will teach the term of 1902-3 have spent the greater part of their vacation in some school for the training of teachers.

No one can be employed in any of the schools of this county who has not had a certain amount of professional training in a regularly established school for the training of teachers. The work that we expect of teachers seems to be running ahead of the teachers' wages, and our greatest need is an increase in the wages of teachers that will enable them to spend twelve months of the year in teaching and preparing to teach.

Many of our schoolhouses are poor and unsanitary, some being wholly unfit for school purposes. But the present indications are good, and as new houses are built they are made good and comfortable.

We have been unable to do anything in the way of centralizing schools, for the reason that the movement is so strongly opposed by the rural population. Our roads are good, and the schools could and ought to be centralized to some extent, at least, in each township. This might be accomplished sooner if the power were moved from local authority. The trustees and other school officials favor centralization, but the work is prevented by those who would be benefited—the patrons of the country schools.

Under our present means of raising revenue it is almost impossible for some of the corporations to maintain a six-months' term of school. But we desire and need a much longer school term, and it seems but fair that the State at large should come to the aid of those who are unable to serve themselves by making the State levy for tuition higher than it is at present.

W. E. STIPP, County Superintendent.

MADISON COUNTY.

Anderson, Ind., September 1, 1902.

Dear Sir—During the last two years of Superintendent McTurnan's term as county superintendent the work done is briefly indicated as follows:

1. Great enthusiasm was aroused among the teachers at the county institute, which was held during the week preceding the opening of school. The very best institute instructors were brought to this county, and each year these meetings have given the teachers such gains in power and zeal for school work that a much higher standard of work is being done.

2. Each school was visited by the school officials each year, the school premises and the school work being closely inspected. Special attention was given to the sanitation and decoration of the schoolroom. The teacher's work was observed, with special attention to his purpose and method. Careless and aimless work was discussed and criticized. Effort was made and is still being made to rid the county of purposeless, aimless and careless teachers, who did not seem to take a vital interest in teaching, and who taught or "kept school" with but the mercantile end in view.

3. Joint institutes were encouraged, and often able men from colleges and elsewhere would give assistance in making these meetings of great value. These joint meetings proved very valuable, as they created an interest among the patrons and pupils as well as the teachers.

During the last year "Plutarch's Lives" was substituted for "The Sanitation and Decoration of the Schoolroom," and excellent work was done. Some of these meetings were of superior character. The very best interest and spirit was shown in almost every instance. The county superintendent attended as many institutes as possible, and encouraged the teachers in their effort to raise the standard of school work throughout the county.

4. On October 27, 1900, was issued "A Hand-Book for the Teachers of Madison County," which gave much information concerning the work of Madison County, both of the past and present. A copy of this work was placed in each school.

5. Much nature study work was done, though the teachers in the district schools could not obtain the best results desired, which was due to the lack of time. Many schools made valuable and interesting collections and performed many of the more simple experiments.

6. Teachers were required to take the examinations, as directed by the State law, and their manuscripts, which were turned over to the county superintendent, underwent a rigid examination. The school officials of the county held that the teachers should maintain a high standard of scholarship and of moral character, and in no instance was the bad character allowed to remain in the teaching profession. The teachers were asked, and in some cases required, to attend an institution of higher learning before teaching. This has been urged for so many years that many of the district teachers are graduates from institutions of higher learning.

7. The County Board of Education assisted the superintendent in elevating the teaching profession in the county. The board consisted of

strong, influential citizens, and without their assistance it would be almost impossible for the county superintendent to be of great service. The board voted unanimously, during the last two years, to place a set of standard supplementary reading books in each school. They also gave special attention to the play grounds and school buildings.

As to the future plans—The present high standard of the teacher will be maintained; the county board will insist upon more thorough work at the township institutes, and as much nature work as practical. Plain, practical common sense in teaching will be urged and insisted upon.

Yours truly,

JAS. W. FRAZIER, County Superintendent.

MARION COUNTY.

Indianapolis, Ind., September 19, 1902.

Dear Sir—Commissioner Harris, in an address before the National Educational Association, said, "That the educational history of our country is divided into two periods—that of the rural and that of the town or city education."

In the past few years it has been one of the aims and objects of the school officers of this county to place before the patrons and pupils the many intellectual advantages of the graded school over the isolated rural school, not because it is rural in the sense that it is in the country, but in the sense of its isolation; lack of proper grading; the multiplicty of grades in a one-room building; the few pupils that now attend these schools, and the excessive cost of maintaining the small school. In this the school officers have failed, as far as this county is interested, to lead the patrons in the several communities into this higher and broader intellectual light. We believe, however, that the goal is in the distance and will be reached; the school officers are not discouraged and will seek to accomplish that end, which will bring to coming generations a more uniform and successful school system.

The high schools of the county are prosperous; the efficiency of these schools of higher learning has increased from year to year; township trustees have sought to place the best men and women at the head of these schools. There are thirteen high schools in the county, seven of which maintain a four-course of study, two of which are commissioned by the State Board of Education.

The standard for teachers of the entire teaching force of the county has been raised, and, we believe, judging from the past successes arising from this higher standard, that the future will demand that the high-standard teacher will displace the dormant teacher who is found in some of the schools of the county.

This desire for a higher standard for teachers is not due to the county superintendent alone, but in this desire he has been ably encouraged and supported by the school officers, the best teachers of the county, and patrons have ably seconded the movement by demanding for their schools the very best teachers, regardless of residence in county or township.

The schools of Marion County, when measured as to the proficiency of the work done, have done good, honest work in most instances. There

is a possibility that in some instances the practical has been neglected, the theoretical being prominent, and the school has failed. Again, there are instances in the county where the teacher has sought to use the course of study as a mold and put every child into this mold, very much to the discomfiture and disparagement of the child. We have labored to have the teacher overcome this idea and use the course of study as a means only to develop the child as nature has fitted him.

The sanitary condition of most of the buildings and outbuildings in the county is bad—very bad. There are some buildings erected in recent years where the sanitary condition has been made very good, but the majority of the buildings are four walls, a roof, some windows that cast a light in the shape of the letter X, and have an unshielded receptacle for wood or coal in the center of the room.

The township institute has not accomplished all for the teacher that it should have done, not so much the fault of the institute, as an institute, but the fault of the actors. In this work, teachers have been indifferent, and with the exception of a few teachers in each township, who have labored faithfully and earnestly, and have done the work, the township institute has been a failure.

It has always appeared to us that the work of the institute is one of the greatest factors in promoting the growth of a teacher and building up a successful and growing school interest, but our observation and experience has been that the work that has been done has not accomplished any great good for the teacher.

With the co-operation of the County Board of Education, composed of men who seek the betterment of the schools of the county, and whose motto has been "That the best is none too good." it is our purpose to reduce the number of isolated schools; to maintain and advance the standard of teachers by insisting on a professional preparation before entering the schoolroom as teacher; to keep closely in touch with teacher and pupil in their relation to each other, the character of the work given, and the working out of the same by the pupil; to encourage the better equipment of the high school; to give close attention to the work of the township institute and insist that the work be done; to co-operate with teachers, patrons and all interested in securing the best-arranged and sanitary buildings, that will insure health and comfort to the many hundred school children of the county. Yours truly,

W. F. LANDES, County Superintendent.

MARSHALL COUNTY.

Plymouth, Ind., August 30, 1902.

Dear Sir—In compliance with your request, I respectfully submit to you the following:

It is not my purpose to go into detail with respect to the improvement in the schools of Marshall County in the past, but that which is most needed in the future, that our children may have the best advantages possible. One of the present conditions which should not exist is too many small schools. In these schools teachers can not maintain the

proper interest, and can not accomplish the good they can in a large school. These small schools should be united with some other school nearby, thereby making the work more effective.

Our attendance is not what it should be, but we are on the upward trend in that direction. Our school buildings compare very favorably with those of other counties around us, but there is room for improvement as to beauty and sanitary conditions. Our roads are good in nearly every part of the county, thus favoring the idea of centralization.

In the majority of the schools of this county five years are represented in the work, but we have a few schools where more than five years are represented. However, an effort has been made to reduce the number to five years' work, which, when accomplished, will be a much-needed improvement.

However, there has been a marked improvement in the schools of Marshall County during the past three or four years, and it is my purpose to call attention to those most important. Better qualified teachers make better schools. A large majority of our teachers have been in attendance at some good school during their summer vacation, thus better qualifying themselves for their work. They are making a special study of child nature, which enables the teachers to become better instructors.

The attendance is better. This, I attribute to various reasons, but the chief ones are: The Truant Law has been a great factor in bringing some children into school that would otherwise not be there, and parents have become awakened to the fact that, if their children are to acquire the foundation of an education, the child must be in school every day, that he may be led, step by step, along the line of the course of study without interruption. The attendance in the schools of this county increased 12 per cent. during the past school year. The discipline is better, thus giving the school and surroundings a better moral atmosphere. Better work is being done in county and township institutes, and trustees, who are guardians of the children, are taking special pains by using their every influence to awaken the interest of parents and pupils to the fact that nothing short of first-class work will be accepted from the teacher and pupil. This interest is being awakened by the trustee by visiting the schools and homes, thus showing them that they are in a position to know the condition existing. We have a perfect organization of the trustees, with regular monthly meetings. At these meetings every phase of school work is discussed, and our difficulties are lessened by our mutual concurrence in our work.

But I consider the past is not as important to the children of this county as the future. What shall we do in the future to make the schools as near perfect as possible? In this respect, let me mention the following things that will receive attention in Marshall County during the coming school year: The work of centralization will go on till, in time, every child in this county shall have the very best school condition possible, although I have decided, and I fully believe, it will not be wise to push this too hard, because it will come naturally after a while, and sometimes it creates enmity and is not easily recovered from.

Another point is the township institutes. I feel that the township institute ought and must be a meeting where thorough work must be done; that is to say, each teacher must prepare on all the subjects to be dis-

cussed. My sentiment is that instead of one teacher preparing on one topic and another on another, that each teacher should prepare on each topic, so that they could discuss it quite thoroughly and make it more effective. The township high school must be improved by a better course of study, by a longer school term, by better prepared teachers in scholarship and professional training, and by the payment of large salaries.

As superintendent, I shall attempt closer supervision in at least two directions: First, by seeing that my teachers know their subject matter and that they make an intelligent presentation of it. Aimless teaching will be no longer permitted. Second, by working out through a series of years a scheme by which the full round of subjects taught in the schools will receive close attention. In this way each year will be spent in the special study of one or two subjects, and in due time stronger teaching will be done in all of them. In this connection both county and township institutes will be made more systematic and more effective. Now that teachers are paid for attending county institutes, better work will be demanded of them.

I have another scheme on foot—that of the merit system; that is, either having the names each month of every pupil who is present every day, has his recitations well prepared, published; or, providing each one with a merit button. It will not be a card or anything of that kind, but a price put upon absolute attendance. My experience is that the truant office is not an absolute necessity. Now, while I think that every pupil ought to be in school every day, yet there is a sentiment growing in this county (and I suppose it is so in all the counties of this State) that there ought not to be very much for the truant officer to do; that if we make our schools attractive and interesting, the teacher going out after the pupil and seeing the parents and interesting them, and all of that, the influence of the truant officer would not be required. In this connection I expect to allow the teacher special credit who so conducts his school as not to require the services of our truant officer, by having his pupils in school every day. I will also give credit to each pupil who cares properly for his books and desk, thus instilling in him the necessity of being careful of what is entrusted to his care.

A whole volume could be written concerning what has been accomplished in the past and what should be attempted in the future, but I have cited only a few of the things that I deem most important and necessary.

With best wishes for the best interest of the schools of the State, I remain,

Yours, very truly,

GEORGE D. MARKS, County Superintendent.

MARTIN COUNTY.

Shoals, Ind., August 29, 1902.

Dear Sir—Your letter of recent date, calling for a review of the work done in our schools during the past two years, was duly received. Replying briefly, will say that the past two years have brought us very satisfactory results along the lines of systematic classification and gradation

of our rural schools, improvement in attendance and interest in the work. We have experienced a continued growth in professional equipment and interest on the part of the teachers of the county. The county and township institutes have been highly satisfactory in point of attendance and interest, every teacher in the county being a member of the institutes and the Teachers' Reading Circle.

Up to date we have been unable to do anything toward establishing township high schools or centralizing our schools. This is not due to any negligence on my part. The demand for township high schools has not become strong enough yet to secure them. We are encouraging the common school graduates to make this demand. Thus far, those making demands are transferred to our town high schools. We hope to increase these demands until it will become a matter of economy to provide instruction in the studies of the high school at home, rather than in schools located outside the respective townships.

The problem of centralizing the schools of our county does not appear to be easy to give solution to. Because of bad roads and our broken country, there is not much encouragement for improvement along this line. The question of abandoning the small schools is receiving due consideration from our township trustees.

The rural schools of Martin County, like many other counties in Southern Indiana, are inadequately supplied with maps, charts and other needed references. Very truly,

E. M'FARLAND, County Superintendent.

MIAMI COUNTY.

Peru, Ind., September 1, 1902.

Dear Sir—It is a source of infinite satisfaction to me in submitting to you this report to be able to call attention to what is probably the most progressive period in the history of Miami County's school life.

Our school age, begun here a half century ago in the hewed log cabin in the clearing, has grown steadily with the demands of a progressive age, and has contributed its share toward developing the splendid school system of Indiana, avowedly the best in the world. The log schoolhouse, with its puncheon floor, its split log benches and monster fireplace, has been superseded by beautiful brick buildings, with modern appliances, scarcely a frame structure now being in evidence in the entire county All this, I take it, is evidence of good executive ability, and in assuming the reins of the superintendency in this county I have not only profited by the administration of worthy and conscientious predecessors, but have attempted to take some steps in advance and add to the already high standing of our schools.

At the beginning of my administration considerable high school work was being done in the county. Although students received no credit for their work, and such a thing as a system was unknown, around this nucleus we have builded a system calculated to encourage the student to enter high school, and for all work done in the higher branches he receives due credit.

The progress in nature work during the past few years has been by leaps and bounds. It is now one of our very important lines of work, and the system we have adopted is gradually being more fully developed. At our annual county institutes we have an instructor well versed in this line of work. Music is also being introduced, but our system of work is not yet fully perfected.

During the past few years we have introduced the plan of a joint township commencement, and are elated at the success of the movement. The exercises are held in the city of Peru, and, by bringing pupils and patrons together from all over the county, have afforded an opportunity for an exchange of ideas and has operated to encourage pupils to continue a course of study that is prone to grow monotonous if not seasoned with the hope of glory.

The sequel to the success of the schools in Miami County is the efficient corps of teachers with which we have been providentially favored, and co-operating with them our township trustees have been men familiar with the needs of a thoroughly progressive school system.

While much has been done in the past, much remains yet to be done, but the system is in a robust state of growth, and future development will be natural and easy.

E. H. ANDREWS, County Superintendent.

MONROE COUNTY.

Bloomington, Ind., September 1, 1902.

Dear Sir—I have worked hard for the last two years to raise the standard of education in my county. I have tried to do this by securing a better teaching force. Fully one-half of our teachers attend some good normal training school during the summer months. I refuse a license, absolutely, to any beginner who has not had something more than a common school training. This policy has had much to do in giving us a better teaching force. Preference is always given to the teachers who are the best qualified.

The average daily attendance has grown beyond my expectation. In 1900 it was 2,292; in 1901, 2,627; in 1902, 3,182. The enumeration in 1900 was 4,449; in 1901 it was 4,431, in 1902 it was 4,525. Thus it is seen that the enumeration has increased only seventy-six, while the average daily attendance has increased 890. The increase in attendance is due partly to the good work of our truant officer. Mr. Kerr, although a Republican, always receives the full vote of the Democrats as well as that of the Republicans. The teachers have done much towards increasing the attendance. The teachers are held responsible for their attendance. They are made to feel that it is their duty to see every parent in their respective districts. These visits of the teachers are made for the purpose of becoming better acquainted with the child's home life, and also to interest their parents in school work. This is the chief reason why the average attendance has increased in such numbers.

We are not building any new schoolhouses in the country. We believe that the time has come for the centralization of our schools. We are making out as best we can with our old houses. Many of our school-

houses are unsanitary. In some instances the children really suffer from cold floors, broken-out windows and the like. The houses are not in good repair. This is due to our so-called "reform law." The township boards cut the levies, and, as a result, the children suffer. The "reform law" is a detriment to our schools.

I shall in the future spend my best efforts in the direction of the centralization of my schools. Our first transfer wagon started in Bean Blossom Township this year. Within the next two years we will have fifty instead of one. The future prosperity of the common schools of Monroe County lies in the centralization of its schools. If our schools were centralized we would have longer terms, less tax levy, better houses, better equipments in every way, better teachers, better classification, and better opportunities for advanced work.

Yours truly,

W. V. PAYNE, County Superintendent.

MONTGOMERY COUNTY.

Crawfordsville, Ind., September 22, 1902.

Dear Sir—In response to your letter of recent date, we feel warranted in saying that during the past two years we have been able to keep growing the good Montgomery County had inherited from the past. We notice a great awakening in the township institutes since two years ago. Teachers were urged to give to the township to the extent of their ability and the getting would be sure to follow. As a result we have institutes that generate enthusiasm and a spirit of studentship that can not fail to reach and benefit every pupil in the county. Perhaps the progress in the quality and quantity of our high school work is more apparent than anything else.

The one problem that was with us at the beginning, and that abides with us still, is the problem of the small school. To this we have given our closest attention. Montgomery County, in the last few years, has done a great deal for the relief of the children in the small schools by putting two or more of them together, and, in some instances, building new buildings and furnishing free transportation for the pupils. Last year, in Union Township, the trustee built a $13,000 building ,consolidating seven schools. Many preferred to furnish their own conveyance. Four wagons transfer the remainder to and from the school. This seems to work well, and, so far as my knowledge goes, has given perfect satisfaction. This year the trustee of Sugar Creek Township has erected a handsome brick building costing in the neighborhood of $12,000. The pupils from six country schools will be transported to and from this building at public expense. A barn, holding sixteen horses, has also been prepared for the accommodation of those who wish to drive. The advisory board of Union Township has already ordered another building similar to the ones just mentioned to be erected next year.

We have changed the time of holding our county institute to some time within the fore part of the term, believing that the teachers will then come to the institute with their problems and better prepared to listen.

As to the future, I would advise keep clear the moral atmosphere of the schools and never cease working until the small school problem and

the problem of the country teacher, with seven or eight grades, are solved either by consolidation or by some other rational process.

Very truly,

W. B. WALKUP, County Superintendent.

MORGAN COUNTY.

Martinsville, Ind., September 17, 1902.

Dear Sir—The public roads of Morgan County are not conducive to great work in school consolidation, but the tendency here has been toward larger schools in the towns. At present no children are being transported at public expense.

The movement in this county for the past two years has been toward the establishment of high schools in the various townships. We have now (September, 1902) ten township high schools, with an enrollment during the first week of 1902-3 of 208. These schools have a uniform four-year course of study, which meets the college requirements in everything, except one year's work in Latin. Every child in Morgan County has a high school education within his reach.

School architecture is receiving more attention than in former years, and some of the buildings recently erected are models of excellence.

The teachers' wage law did not greatly increase wages in this county, but it has been, and will continue to be, an incentive to better preparation for teaching. Probably the greatest hindrance to the teaching profession in any county is that every year many common school graduates are able to secure a license, and by reason of friendship, sympathy, or other cause, obtain a school, to the exclusion of some better prepared teacher. I think that each applicant for teacher's license should be required to furnish a certificate of at least two years' successful high school work, or one full year's work in a normal school of recognized worth.

Yours truly,

W. O. BAKER, County Superintendent.

NEWTON COUNTY.

Kentland, Ind., September 4, 1902.

Dear Sir—In complying with your request for a review of the progress made in our schools in recent years, also future aspirations, etc., would say, First, since Newton is one of the youngest counties in the State and therefore subject to more rapid changes than older counties, many improvements impossible two years ago may be quite feasible two years hence. Stone roads are rapidly taking the place of our mud roads. This improvement alone opens the way for many material improvements in our schools.

We have abandoned many small schools, improved the others in every possible way. We have a much better organization of our County Board of Education than we ever had, thus giving the superintendent a better chance to carry out needed improvements. We have established a uni-

form course of study in our high schools, enabling the pupils of non-commissioned schools to complete their work in commissioned schools without interruption.

We have organized the teachers of each township in such manner as to give more satisfactory results of work done at township institutes. Our teaching body is and has been for years superior to our physical environment, yet we believe that present conditions demand academic training that is the equivalent of at least four years of high school work before a license is granted.

We are making an effort to place the Young People's Reading Circle books in every school, and believe that some pressure should be brought to bear on trustees in this matter. I have enumerated a few of the things that are of most importance to us at this stage of our development, and subscribe myself, Your obedient servant,

W. L. KELLENBERGER, County Superintendent.

NOBLE COUNTY.

Albion, Ind., August 21, 1902.

Dear Sir—In response to your request, I herewith give you an outline of our work and progress:

School Teaching—Many of our teachers are graduates of normals and colleges, and we have very few that have not done at least some preparatory work, and the precentage of trained teachers is growing rapidly. We have a surplus of teachers and are thus enabled to cull out, and applicants soon find that if they want licenses and schools they must earn them by preparation, application and ability.

Attendance in our schools has been very materially increased by the passage and action of the compulsory education law, by the novelty of conveyances carrying pupils to schools, and as we are constantly developing our high schools, that is also a decided advantage and incentive.

We now have six non-commissioned and three commissioned high schools in Noble County, and our trustees are very willing to transfer pupils to high schools when none are maintained in the pupils' home corporation, and are equally ready to transfer pupils who graduate from a non-commissioned school to a commissioned school for the continuance of their studies.

Our officers are careful, as a rule, and make a study of both teacher and school, and are thus able to place teachers usually where there will be little or no dissatisfaction.

Here, again, is another advantage in having a surplus of teachers, for each one knows that there is another ready to take his place if he fails, and thus he is forced to his best efforts. Besides, we promote our teachers as rapidly as possible, and then expect them to advance with the position in general growth.

We have built, during the past two years, two three-room ward buildings at Kendallville and Ligonier, respectively, both of which are models of architecture, sanitation and convenience. A splendid four-room township high school was built at LaOtto and a two-room house

at Kimmell, besides three modern district schoolhouses. Trustees hesitate to build district schoolhouses, however, except it be absolutely necessary, as so many are already abandoned because of centralization and owing to the small number of pupils in many localities.

Centralization is becoming more popular each year. We started our first "hack" in Orange Township in 1895, and will in 1902-3 have about twenty conveyances in use.

Orange Township has now only three district schools, Perry four, Allen five, and nearly every township in the county abandoned or concentrated several schools, with the result that we have better schools where maintained, and at a less cost to the corporation as a whole. Of course there are some district schools that can never be abandoned or conveyed, on account of the distance, roads, etc., but I think that ten years hence there will be comparatively few district schools in Noble County.

The sanitation in our cities and towns is generally good, but in and about some of our country schools it is not, owing to the carelessness of trustees in some instances, and to the uncertainty of keeping up the school in others, while some trustees are so handicapped by ignorant or stingy advisory boards, that they can do only what they are compelled to do.

However, the general improvement is very satisfactory to me. My policy is and has been to have a healthy, steady growth in right methods, buildings and all things pertaining to our schools, but have attempted no radical reforms, believing that gradual changes are better.

Respectfully submitted,

E. L. ADAIR, County Superintendent.

OHIO COUNTY.

Rising Sun, Ind., September 1, 1902.

Dear Sir—I believe that the work of the schools of this county is improving, and that each year finds some advancement. I believe that our corps of teachers compares favorably with that of other counties in the State. It has generally been the policy of our trustees to select the most competent teachers obtainable, and to give them charge of schools where it was thought their work would be most profitable to pupils, and not always giving them schools in some particular neighborhoods that they might prefer for personal reasons. We have endeavored to have each teacher become acquainted with the peculiar conditions of his especial school and adopt the methods best suited to obtain the good results there. I believe the township institute has been a great help in the better organization of the school work, and that the practice of having teachers visit one another's schools has been profitable.

The attendance in our schools has grown better each year since we have had the Truancy Law, and we have kept some children in school long enough to acquire sufficient education to be of great value to them, that without the application of the law would probably never have learned even their a, b, c's. In many cases, where we have attempted

to put children into the schools, we have found the parents at fault more than the children; and after the children were once enrolled their attendance continued after we ceased to have control of it.

It has not been found necessary for us to erect any schoolhouses for a number of years, but we have found it best to consolidate some of the weaker schools, which has generally been satisfactory to all parties concerned. It is not practicable to consolidate schools in this county, however, to the same extent that it is in some of the other counties where the surface is more level and the roads better.

The sanitary conditions of the schools in this county are in nearly all cases good.

E. S. ESPEY, County Superintendent.

ORANGE COUNTY.

Paoli, Ind., July 17, 1902.

Dear Sir—I will in this letter give you a brief account of the more important movements and accomplishments along the lines of school teaching, administration, school attendance, schoolhouse construction, sanitary affairs, and so on.

In licensing teachers, I have intended to grade closely and give to the county those teachers who were morally, intellectually and by nature fitted for their work. The minimum wage law has greatly increased the number of applicants, and it is the intention to encourage those having normal and high school training. I believe the wage law has greatly increased the number of teachers and prospective teachers, who have attended normal and training schools the past year and spring.

Out of a total of one hundred seventeen teachers, about fifty have been in school this spring and summer. In counties such as this, where wages have been in many cases very low and terms short, there has been a tendency among the more able teachers to leave as quickly as they had made a start and secured experience for places where it paid better. In several instances these teachers returned by reason of the minimum wage and six months' school term laws. I believe we will now be able to hold such teachers at home to a great degree and be able to raise the standard of the teaching force considerably.

The general average school attendance has been increased fully 25 per cent. during the past three years, as a result of the compulsory education law and an efficient truancy officer. It could be made more effective yet if there were two truancy officers for a county of this size, as there is more work than one man can do thoroughly. It is also frequently difficult to get results from prosecutions in the local justices' courts, as the law is not explicit upon some points. For instance, a justice decided last winter that the burden of getting a physician's exemption certificate rested upon the truancy officer instead of upon the parent of the child exempted. Any one who has watched the practical operations of this law will be convinced that if this were accepted it would be a subterfuge for every one who wished to evade the law, and greatly complicate the duties of the truant officer. We also failed to get the cases into the Circuit Court, as the prosecuting attorney seemed averse.

In spite of these things, though, the law has done much good, and public sentiment, which was once against it, has been largely turned in its favor.

School administration has been very pleasant, as the superintendent has been supported by a body of trustees, one-half of whom were elected from the best teachers in the county. This has given us a Board of Education for the county that looks upon any question from the standpoint of schoolmen. I find that it is helping, too, in making them able to select better teachers and to oversee their schools in an effective manner.

With the exception of the town of French Lick, the buildings throughout the county are, as a rule, up to the average. The building at French Lick is in bad condition, in a poor location, and last year was totally unable to accommodate the children who should have and who desired to attend to school. In my opinion it needs to be condemned, unless the town authorities take immediate steps to remedy conditions, as the interest of 200 children are at stake, as well as their health. As an occasional new district school building is erected, it is being done in conformity with modern sanitary regulations. While many buildings are getting old and lacking in some respects, yet I believe the trustees are doing the best that can at present be done to remedy the defects. Perhaps the worst feature is the water, which in several instances comes from poor springs and, I am afraid, sometimes results in typhoid. The good done by the Reading Circle book, "Sanitation and Decoration," has done an incalculable amount of good, and I found our teachers observant of sanitary regulations as never before, and it is in these things that much good can be done in the next few years in this county. The recent transfer laws have had a tendency to do away with the country schools situated near the towns, and in at least two townships conditions are favorable for centralization of schools, but as yet nothing has been done, although it will probably be commenced in a limited manner in one place this fall.

I have been working to grade the schools according to the "State Course of Study," but have found it difficult to do in some townships, since one-half of them, thus far, have not been able to conform to the six months school law, as the property valuation is so low that even a 35-cent levy does not give them money enough. Some townships will run to ninety or a hundred days only, under present conditions.

I expect to strengthen our township institutes and make them the means for reaching the teachers, and by urging better preparation from the teachers and improving school surroundings to raise the standard generally. Very truly yours,

CLAUDE RANKIN, County Superintendent.

OWEN COUNTY.

Spencer, Ind., September 19, 1902.

Dear Sir—It is with pleasure that I attempt a response to your call for a letter setting forth, in a general way, some of the school conditions of Owen County.

In a number of ways, the past few years have shown very evident progress. Our teachers more and more represent the most honest and energetic young men and women of the several school districts. The past year found a larger number of Owen County teachers, and those preparing to teach, in the better educational institutions of the State than ever before. I believe I am safe in saying that we now have in our teaching force more graduates and undergraduates from the above-mentioned schools than at any time in the past. There seems to be a growing feeling among our teachers that if they would remain in the school work, the best preparation possible is none too good for them; and we believe that it is only a question of a few years when the "summer" farmer and "idler," though we have but few at present, will not be found asking to direct and govern those who should later be the most influential citizens of their various neighborhoods.

With no pretense at flattery, but owing to the true worth of instructors chosen, and the good appearance and agreeable mental attitude of the teachers, we consider our last county institute a banner one. We think self-congratulation is not unjust when in a small county of only 123 teachers, we are able to maintain an institute, the good of which could not be overestimated, and which cost us nearly $300. The township institute, from which the teacher should probably receive more direct help than from any other source, is marked by the best attendance; and we believe that, owing to the books chosen, the coming year will give us better results than did the past one. As this county has several small townships, we have arranged this year three combinations of two townships each, thus making it possible to more successfully do the work as outlined. Last year in a number of these township meetings, the work became dry and uninteresting, owing, as we think, to the prosaic papers read. We have this year tried to discourage the reading of papers, and advised, after an honest effort at preparation upon the part of the one on duty, that such work be given with reference to nothing more than notes. This will necessitate a more thorough preparation on the part of the teacher, cultivate his ability to express himself orally in good, clear English, and cause the work to become more interesting to both speaker and listener than it would otherwise be.

Owing to the compulsory education law, which is gradually meeting with more favor from the public, the attendance of pupils at school during the past two years has been much more satisfactory than at any previous time. However, the law is not enforced as rigidly as it might be, owing to some teachers' neglect in reporting absentees; and also the truant officer, although a man of honest purpose in all his work, has probably been too lax in a few cases—notifying a second time when prosecution should have been resorted to.

The two school boards of the county at Spencer and Gosport, respectively, are each composed of men especially interested in school affairs, having shown by their choice of teachers and improvements made that the betterment of the schools is their controlling motive. The Spencer School Board has this year added an entirely new and well-equipped physical laboratory to the high school. This addition, with the $111 worth of new apparatus, is a much-needed improvement and a move in

the right direction. Gosport is to have this year a new school building. The school board is to be congratulated for its good judgment in choosing a site with abundant play-ground; and especially for the large and stately trees, which give shade in the summer, protection in the winter, and decidedly add to the beauty of the place. The new building is of brick, will be two stories high, and covers a space of 58x70 feet. The basement is 32x70 feet. This modern structure will contain six regular classrooms, a well-equipped laboratory and a large assembly-room. When completed and fuly equipped, it will stand a credit to the town and county as a modern, sanitary school building.

The Township Trustees. All enterprising men with good business sense are reading, thinking and acting along more progressive lines than in the past. A very few, only, have not paid their teachers for attending county institute, but we believe those who have not will do so the coming year. Most of the trustees visit their schools, and attend township institutes, thus lending encouragement to the teachers, and gaining in the best possible way a clearer notion as to what should constitute good school work. In the matter of selecting and placing teachers, which is one of the most important duties of the trustee, we believe more effort is being made to secure the best teachers possible for the money. Some of our trustees, for a few years, have been unable to maintain a six-months' term of school; but we believe they are doing the best they can under existing conditions, and that they will soon be "on their feet," able easily to comply with the law.

Our people and trustees are gradually becoming educated in the matter of schoolhouse construction, to which cause much credit is due the secretary of the Owen County Board of Health, Dr. N. D. Cox, who is an untiring worker in the matter of school sanitation. Although our county at present affords but five modern, sanitary, one-roomed school buildings, and some of these against the most severe disapproval, we believe the hardest of the fight is over, and that in the future our people will say: "Give us the best, because it not only looks the best, but is the best, and above all the cheapest—it being the strongest safeguard to the health of our children."

In the future we hope to have more professionally trained teachers, trustees not debating the advisability of erecting modern sanitary schoolhouses, more centralization of schools where such seems practicable, and more and better educational meetings.

Very truly yours,

B. M. HANCOCK, County Superintendent.

PARKE COUNTY.

Rockville, Ind., September 8, 1902.

Dear Sir—In response to your request for a statement of the educational progress made in this county during the last two years, permit me to say that the more important movements have been along the following lines:

1. In the matter of school buildings and their equipment, much has been done to advance the school interests of our county. Within the

last two years, four township buidings have been erected, which are sanitary and modern in every respect. They are of brick, have from four to six rooms each, are heated by furnaces, have the dry closet system, approved method of lighting, and are fitted with up-to-date apparatus and appliances. In our district schools much has been done to make the schoolhouses and surroundings more comfortable, beautiful and sanitary. In some townships almost every schoolhouse has been subjected to a thorough cleansing. The walls have been painted or papered and beautified with pictures and other decorations. The latest reference works and all needful equipment have been purchased, and in many ways the progressive spirit has found its way into our country schools.

2. The Uniform Course of Study and the Uniform Examination Questions have been the means of advancement in the direction of a more perfect system of gradation and classification. They have been instrumental in unifying the work of our country schools. Three townships are maintaining a three-years' high school course, in addition to the instruction in the common branches. There were sixty-one pupils enrolled in these high schools during the last school year.

3. The compulsory education law is a factor that has influenced the attendance in our schools. The first year after the law was enacted it worked an immediate and gratifying increase in the enrollment and attendance. Since the first year its influence has not been so great, nor its workings so satisfactory; yet the attendance is much better than before its enactment and the wisdom of the law is generally acknowledged. We have honestly tried to enforce the spirit and letter of the law, and while it is a source of regret that there are many difficulties connected with its administration, yet that the law has accomplished and will continue to accomplish much good, there can be no question.

4. The act of the last Legislature, giving the township trustee authority to abandon a district school when the attendance is so small as to make its further maintenance unprofitable, has aided in the solution of the problem of the country school. Under this act several district schools, with an average attendance of from six to twelve pupils, have been temporarily abandoned and the pupils from such schools attached to neighboring districts. In some cases pupils from abandoned districts have been transported at public expense to other schools, and in the main this plan has proved very satisfactory. However, local conditions, such as roads, streams to be crossed, etc., are factors to be considered in any plan for transportation.

5. The Teachers' and Young People's Reading Circles have played an important part in our educational progress. These organizations have been a great stimulus to the growth of both teachers and pupils. They have not only been an incentive to better scholarship, but have led many into the habits of reading and study. The teachers' books on psychology and general culture have aided in fostering a taste for good literature and in giving larger views of life and better notions of professional teaching. The Young People's Reading Circle has done an excellent work in supplying our country schools with rich material for supplementary reading, which is read not only by the pupils, but by many of the patrons. There are now in many of our district schools libraries of from 100 to 250 volumes

of well-selected reading matter. Last year 2,000 volumes were added to these libraries, and 1,700 pupils received certificates of membership in the Young People's Reading Circle. These books are a power for good. They supplement the regular work of the schools, but more than that, they lead many of the pupils to an appreciation of the best in literature,

6. But, however complete and satisfactory the material equipment of a school, it will fall far short of its highest usefulness if its teachers are inefficient. The teacher is the great factor in the school. In this connection, I may say that while the changes in the teaching force in this county make it necessary to employ from fifteen to twenty beginning teachers each year, yet our teachers are, for the most part, intelligent students of the problems of the school, earnest and devoted to their work.

I believe the future policy of our schools should be "thoroughness and efficiency." Forward movements should consist not so much in radical changes in our educational system as in perfecting and developing it; not so much in establishing more schools as in increasing the efficiency of those already established; not in erecting more buildings, but in equipment calculated to increase their usefulness. We need closer supervision, more professionally trained teachers. Something should be done to secure an element of permanency in the work. The temporary nature of the position drives many teachers from the profession every year. When this element of permanency in the profession is brought about, the teachers can afford to prepare for the work, and a higher degree of efficiency in the teaching force will be insured.

Very truly,

J. M. NEET, County Superintendent.

PERRY COUNTY.

Cannelton, Ind., July 17, 1902.

Dear Sir—In answer to your request, I beg to submit the following report:

Our schools are not ideal. Cannelton, Tell City and Troy have as good schools, perhaps, as other cities of their size, and the following report does not pertain to them. Tell City, however, should have a high school

My first impression on visiting the schools five years ago was that we were maintaining a great number of unnecessary schools. The impression long since became a conviction. I have found this trouble hard to remedy, and last year there were, at the very lowest, ten schools that should have been abandoned. The per capita cost of the pupils in the schools varies from $4.75 in the large districts to $34.50 in the smallest. It is a gross misuse of funds to continue a school when its general average is below ten, especially when these could be accommodated at another house one and one-half miles away. The great number of these schools makes it impossible to fulfill the law requiring 120 days. One township was compelled to close last year with a term of sixty days. Here is the problem that confronts the trustee: Leopold Township has eight schools. The daily expense for tuition is about $18. On an enumeration

of 326 it will draw less than $1,000 from the State school fund. The law permits a local levy of 35 cents, which on $99,000 taxables, will produce less than $350. This exhausts the regular sources of revenue, and our schools must close with seventy-five days. This same difficulty is present in every township. We can not consolidate because we have no roads. We have no high schools because we have no money.

Our houses are very bad, built on the cheapest possible plan. There is not a single house that cost $500, and most were built for the half of it. Many are in criminal condition, unpainted, uncovered, unplastered, unventilated and unclean—unfit for anything, except the grand jury or Board of Health. And yet the trustees are doing all they can. Take the township spoken of above as a specimen. A 50-cent levy will bring in $500. The county and township institutes cost $200, leaving $37.50 to the district for repairs, fuel, supplies, etc. Insurance is high. These cheap houses are inflammable and burn often, averaging two houses every year.

From a financial standpoint our situation is not very promising, and it will take an extraordinary board of trustees to solve the difficulty. On the other hand, we have a good body of teachers. Many of our best young men and women teach school. Few of them remain in the work longer than three years. One hundred and thirty-four teachers have taught their first school under my supervision in five years, making an average of twenty-seven per year. Of the 135 teachers who taught in 1897, only forty-five will teach in 1902. This gives some idea of the difficulty in keeping efficient, not to say trained, teachers in the district schools. While none of our teachers are graduates, many of them have done some work in college, and all show an extreme willingness to prepare for their work. The schools have suffered considerably at the hands of teachers too young to teach. The county superintendent has made a serious mistake in not refusing to license all applicants under eighteen years of age.

It has been our policy to build up a library at every school for the use of scholars and patrons alike. Some of these now contain 200 books. These have nearly all been bought without the aid of trustees, although they have helped where possible. What we need is a trustee to abolish about one-third of his districts and rearrange and take care of the remainder. Until such time the progress of our schools is ended and we must be content with high taxes, poor houses and short terms.

Yours respectfully,

LOGAN ESAREY, County Superintendent.

PIKE COUNTY.

Sophia, Ind., September 1, 1902.

Dear Sir—Our schools are enjoying a steady, healthy growth. Our attendance has materially increased under the compulsory law, and as the attendance increases the interest increases commensurately.

Our teachers compare favorably with the teachers of adjoining counties, but we feel that we need more abundant preparation. Too many

are satisfied to teach on a low grade of license, and expect their "success" to make reparation for their shortage in knowledge of subject-matter. We can never hope to have our schools reach any great degree of proficiency until we shall have thoroughly competent, practical, earnest, enthusiastic, progressive teachers.

While we are working toward proficiency in the teacher, we are also studying modern school architecture, with a view to better accommodation for physical, mental and moral growth.

While Pike County has done virtually nothing yet toward centralizing her schools, we have been observant of the workings of consolidation in the forty odd counties of the State, and have concluded that the theory of centralization is the correct one. Meantime we have been casting about for dilapidated schoolhouses, whose sites are centrally located, in townships having no graded school, with a view of beginning the work of centralizing. We had hoped, however, that legislation would come to our relief in allowing trustees to abandon schools whose general average for the term does not reach, say, fifteen. In view of consolidation of schools, we have concluded to build no more new district schoolhouses, unless the demand be very urgent and reasonable beyond question.

The systematic study of scientific temperance, sanitation and decoration, Teachers' and Young People's Reading Circle books, has had much to do in raising the moral standard of our people through the county.

Yours truly,

J. D. GRIMES, County Superintendent.

PORTER COUNTY.

Valparaiso, Ind., September 20, 1902.

Dear Sir—Having had charge of the schools of this county but a very short time, it is with reluctance that I endeavor to briefly review the progress they have made in the past two years. It is really difficult to say just what has been accomplished in that short time, as the seed of that which is now bearing fruit may have been sown a number of years ago. Nevertheless, I am glad to say that there has been a general upward trend in education throughout the county. There has been closer and more systematic supervision which, with the excellent co-operation of the teachers, has brought about the very best harmony and unity all over the county.

The trustees are all very liberal and willing to furnish everything which will promote the interests of their schools. They are still giving the longest terms of school possible, even at the increased per diem of the teachers. The majority of the townships have a nine-months' term, while none have less than eight and one-half months.

The school buildings which have been erected during the past two years are much better and more beautiful than those erected hertofore. The position, plan of architecture and all equipments have been well studied, so as to give to the pupils all conveniences possible. There has been a steady increase of pupils finishing the common branches and

taking up the high school work. Consolidation is attempted wherever the people can be interested along that line, and is being carried out in five of our twelve townships. Although the venture is still young, it is meeting with universal approval. One trustee is furnishing a special music teacher for his schools, while in the other townships the teachers are putting forth their best efforts to interest their pupils in music. The music text-books are furnished by the trustees, and are the same throughout the county.

Our teachers are all well trained, enthusiastic and much interested in their school work. One of the high schools has placed a two-years' business course of study in with its high school work. This being its first year, the enrollment is very promising, and we feel confident of its success. The president and vice-president of the college here are much interested in our welfare, and are always ready to lend a helping hand whenever needed, for which the teachers and county in general are sincerely grateful.

As to my predecessors, I must say that the people of this county owe them much for their interest and painstaking energy, which has helped to raise our district schools to the high plane on which they now stand. They have fostered the little high schools dotted over the country, which started with only one year of high school work and which, by persistent energy and the growing demand for higher education of the pupils of the county, have been enlarged until they now nearly all carry three and four-year courses, with well-trained instructors. The standard for teachers in this county is already high, and it is my intention to elevate the standard all that is within my power, as we have more teachers than schools, owing to the long terms and wages that are paid.

Taking the conditons that I have just mentioned into consideration, the educational outlook of Porter County is very promising. It will be my aim to consolidate the schools whenever it is practicable. I also look forward to the time in the near future when each township will have its special music teacher.

Hoping that your last biennial report may be your best one, I remain, Your obedient friend,

S. C. FERRELL, County Superintendent.

POSEY COUNTY.

Mt. Vernon, Ind., September 1, 1902.

Dear Sir—The educational interests of Posey County are in a healthy condition. One hundred and forty-nine teachers are employed in the schools of the county, of which 75 per cent. have received training in normal schools or colleges. Some effort has been made toward consolidation of township schools, with general satisfaction to school patrons. The road improvements recently made in some of the townships have materially aided school attendance. Every teacher in the county pursues the course of reading outlined for the Teachers' Reading Circle. All but one township of the county have seven and one-half months or

more of school. Aside from thirteen two-room district schools, which complete at least one year of high school work, there have been established, the past two years, four township non-commissioned high schools. During last year four two-room brick schoolhouses have been erected. These buildings were constructed in accordance with the most improved modern plans of school architecture.

As to beneficial school legislation, I would suggest: (1) A modification of the license law, requiring pedagogical training in some reputable normal school or college of all applicants for teacher's certificates; (2) a change in the truancy law, making the township trustee responsible for the enforcement of the Compulsory Educational Law; (3) a law to secure the appointment of non-partisan school boards in cities, and the removal of the possibilities of politics entering into the employment of teachers and superintendents; (4) the modification of the text-book law by which county superintendents may be exempt from the duties of bookkeeper and collector for the school book contractor.

Respectfully submitted,

CHAS. A. GREATHOUSE, County Superintendent.

PULASKI COUNTY.

Winamac, Ind., August 25, 1902.

Dear Sir—Allow me to submit the following in answer to your request for an expression relating to the school work of Pulaski County:

For the past four years we have been emphasizing the work of the high school. During that period we have established six high schools. We have adopted uniform text-books, and have a uniform course of study. Four out of the six schools established are township high schools, and close with the same number of days as the district schools. The patrons of the district school do not complain about the short term, but those of the high school do, because it is impossible to do the work of the year in such a short term. We need legislation to the end that the high school might continue long enough to finish the year's work. We also favor State adoption of high school text-books, and a uniform course of study.

The term for the district school is too short. This is attributed in part to having too many schools to the township, and to the teachers' wage law. Our County Board of Education feels that some relief might come through the consolidation of the township schools. The board is in sympathy with the thought, but the public bitterly opposes the movement. This, we think, comes from the fact that our roads are such that consolidation of the schools at present is not thought to be practicable. What opposition we have to the teachers' wage law comes from the fact that the rate of local tax for tuition is too high. We have townships where a six-months' term of school can not be maintained on a 30 per cent. levy. We feel that, inasmuch as the schools are State institutions, all the tuition funds should come from the State. We, therefore, favor raising the State levy from 11 to 22 cents. This would relieve the township entirely from the tuition levy. Consolidation of the schools and raising the school fund must come through legislation.

In our work this year, it is our intention to place emphasis on the work of the grades. We feel that the work of the grades must be of a high standard to fulfill the requirements for which the schools were established. We can not afford to neglect the grades for the high school or any other phase of school work. Our teachers are not wholly satisfied with the reading matter furnished the Young People's Reading Circle. We would earnestly recommend that each year some works of our standard authors be added. The Young People's Reading Circle work has done much good in elevating the standard of the schools. We are not satisfied with our text-books, especially the grammar and arithemetic. Give us none but the best.

We are of the opinion that the State Department of Public Instruction should issue only a thirty-six-month county teachers' license. The division of authority between the State and county is a menace to school supervision. We think that none but the best teachers should be privileged to teach in any county of the State. We have enough fifth and sixth-grade licensed teachers in our own county. We invite competition only from first, second, third and fourth-grade licensed teachers.

School sanitation should receive more emphasis than it does at present. Location, ventilation, heating and lighting of schoolhouses can be greatly improved. It might be well if our plans and specifications for school buildings were submitted to some authority competent to act in such matters.

Trusting I have complied with your request, I am,

Yours respectfully,

J. H. REDDICK, County Superintendent.

RANDOLPH COUNTY.

Winchester, Ind., September 15, 1902.

Dear Sir—In compliance with your request, permit me to submit the following, taking up the items pretty nearly in the same order followed in your circular letter:

School Teaching.—Under this head we have instituted such measures as would result in a greater economy of time and effort on the part of both teachers and pupils. Irrelevant and self-answered questions, repetition of answers, faulty conclusions to be corrected later at the expense of a loss of time, errors in methods of doing and thinking—in other words, tedious and unpractical ways of doing things to be dropped for more sensible and business-like processes after leaving the schoolroom—tendency of the teacher to think for the pupil, reduction of actual mental work on pupils' part to the minimum, allowance of unrelated matters to interfere with the legitimate work of the school; these and many other objectionable features we are trying to eliminate.

Inexperienced teachers are encouraged to add to their scholastic attainments at least a year's professional training; teachers of limited experience are required to spend at least every other vacation in some training school, while old teachers are required to do some correspondence work every year, and to keep up with the spirit of progress, under penalty of being dropped from the roll.

School Attendance.—Under the operation of the compulsory attendance law the per cent. of attendance, based on the enumeration, has increased from 63 per cent. in 1898-9, to 65 per cent. in 1901-2; and, based on enrollment, from 74 to 76 per cent. during same period. This may seem discouraging on first thought, but when we consider that the record of attendance is much more carefully kept than formerly, and hence that absentees are more surely noted now than they were, be believe the results amply justify the measure.

Administration.—Our supervision is largely through the agency of the township trustees. Indeed, I may say that I depend upon the visits of the trustees more than I do my own to keep in touch with the teachers. Through a system of blanks provided for the trustee, I am advised of condition of the schools every three or four weeks, and in cases of emergencies requiring instant attention I am immediately notified. It is due teachers and school patrons to say that the efficacy of these visits by the trustees is duly recognized, and these officers are heartily encouraged to give to the schools their active attention.

Centralization.—Our efforts in this direction have been confined so far to the abandonment of weak schools and the accommodation of the pupils in contiguous districts. Some five or six schools will be laid down this year. Three hacks, at a cost of $20 to $35 per month, the driver furnishing his own conveyance, will constitute the means of transportation. School officers are alive to the advantages of strong over weak, and graded over ungraded schools, but hesitate to abandon expensive property, especially where it involves the erection of costly central buildings. While we may be deemed somewhat conservative, yet I think I may safely say we are approaching the general consolidation of our schools.

Sanitation.—Due to various influences, among which may be included your own recommendations, the efforts of Dr. Hurty, trustees' discussions, Teachers' Reading Circle study and agitation among school patrons, a most excellent sentiment exists throughout the county relative to healthful influences. Our new houses are constructed in harmony with hygienic rules, and our old ones are being remodeled or cleaned each year in such manner as to conduce to the health and enjoyment of the children.

Bi-monthly Examinations.—Pupils are required to take these examinations in one day—the eighth Friday of each period—and since the schools begin uniformly on the same day our examinations are held at the same time in all the corporations. Our town and city schools endeavor to harmonize their courses of study as far as may be with that of the rural schools. To this end bi-monthly questions are sent to these schools for comparison. A sufficient number of copies of questions is sent to each school to enable each pupil to have a printed list before him. The teacher is saved the labor of writing the questions on the blackboard, and the strain on pupils' eyes in reading from the board is thus avoided. Pupils' manuscripts are graded on the basis of the whole number of printed questions.

Diploma Examinations.—Are held on uniform dates, and are in charge of the trustees. To be admitted to this examination, the pupil must bear a certificate from his teacher that he has done at least one full eighth year's work. But one examination is allowed in any one year.

Future Policy.—I have indicated in the outset with sufficient fullness, perhaps, what I hope to do in the near future. A higher grade of professional work on the teacher's part, a still greater recognition of the trustee's official relation to the schools, and a deeper interest in educational affairs on the part of pupils and patrons, are conditions we hope to realize.

Respectfully,

CHARLES W. PARIS, County Superintendent.

RIPLEY COUNTY.

Versailles, Ind., August 15, 1902.

Dear Sir—The teachers of this county two years ago were not as thorough scholars as they should have been. A great number of them were just beginning to teach and had little preparation for the work, beyond what had been received in the common schools and a year or two of high school. I have made a great effort to improve the teaching force, not only in the last two years, but ever since I entered the office five years ago. My plans for improvement have been as follows:

1. By dropping out or refusing to license the weaker teachers.

2. By encouraging those remaining in the profession to attend the State Normal School and other schools, in which they might not only improve in scholarship, but also get some ideas in reference to methods of teaching.

3. By professional training in township and county institutes and county associations.

4. By criticisms and suggestions of county superintendent in the inspection of school work.

I think that by means of the points indicated, I have had some success in increasing the efficiency of the teaching force. Two years ago this county had two teachers with sixty months' license, six with thirty-six months', twenty-eight with twenty-four months', and eight with twelve months; while at the present time we have one teacher with a professional license, six with sixty months', eleven with thirty-six months', forty-nine with twenty-four months', and seventy-two with twelve months'. These figures show the teaching force much stronger than two years ago. Even those teachers holding six and twelve months' licenses now are much stronger than two years ago.

About one-fourth of the teachers in the county now attend the State Normal during their vacation, and about one-half that many attend other educational institutions outside of the county, while a few each year attend a local school for the training of teachers.

The professional training given by the township institute is of great value. Some academic work is given, but it is principally professional training by means of the study of Reading Circle books. The county institute and association educate teachers socially as well as professionally, being a great means of general culture.

The teachers have also been given much professional instruction by means of the criticism and suggestions of the county superintendent. One of the points that I have placed much stress upon is the definite as-

signment of work for the recitation. This causes both pupil and teacher to prepare thoroughly, and the result has been logical thinking on the part of both pupil and teacher. I am continuing to try to improve the teaching force, for "as is the teacher, so is the school."

As a means of helping this improvement, I have always encouraged trustees to hire better teachers at higher wages, and in this way keep good teachers in the profession.

Centralization of Schools.—I have made an effort to get trustees to abandon schools in which the attendance was too small to do good work, and enroll the pupils in other districts, and thus save much money to the people and at the same time give them better school work. Two schools were abandoned last year with good results, thus saving about $500 to the people, with better work for the children than if these schools had not been abandoned. Only $50 was paid for transportation. The coming term there will probably be five additional schools abandoned, at a saving of probably $1,000 to the people and still better results to the children. I expect to continue to encourage the centralization of schools.

School Administration.—What this county needs in order to have better schools is a restoration of the old State levy of 16 cents. At the present State levy, it requires such a high local levy that it is burdensome to the taxpayer to keep up the schools, and tends to make them unpopular with the people to a certain extent.

School Sanitation.—There has been some progress made in the last two years towards putting our school buildings in a proper sanitary condition. There have been but few houses built in the last two years, but the buildings that have been erected have been carefully planned to insure proper sanitary conditions, and some attention given to architectural beauty. There is much room for improvement yet.

School Attendance.—I have made a continuous effort to increase the school attendance, by endeavoring to keep up the interest in the work and by using the compulsory law. In this we have been only partially successful. In 1899-1900 we had an enumeration of 6,275, enrollment of 4,336, and an average attendance of 3,206. In 1901-02 we had an enumeration of 6,103, an enrollment of 4,132, and an average attendance of 3,129. This comparison shows that we have held up well on average attendance, considering the loss in enumeration and enrollment, but the enrollment is not what I would desire. I also hope for a still better gain in attendance of those enrolled and a better enrollment.

Conclusion.—I hope to see a teacher of broad culture and liberal education in every schoolroom in the county. I also hope to see this teacher well trained in methods and management, to the end that every pupil in the county may not leave school until he has a healthy body, a trained intellect, a pure heart, and an obedient energetic will. Sincerely,

CHAS. S. ROYCE, County Superintendent.

RUSH COUNTY.

Rushville, Ind., August 14, 1902.

Dear Sir—The professional interest among teachers has made a visible growth during the past two years. Teachers in all departments are at every opportunity taking academic and professional training. The schools are becoming more satisfactory to parents and pupils. The eighth grade has ceased to be the goal. At least, two years of high school work are available to every student in the county. Thorough teaching is manifesting itself in promptness and regularity of pupils.

Mr. Gary, whom I recently succeeded, was instrumental in effecting a demand for genuine school progress, rather than fads. The township trustees are deeply interested in the welfare of their schools. One said to me: "Well, I have two sets of teachers to employ yet. When the end of my administration comes, I want to have the best teachers in the county." Another said: "My teachers must have done work equal to a commissioned high school course. In fact, a young person has no business in the world until he has completed such a course."

Popular opinion is against centralization of schools. School officers are urging it, however, and hope to effect some centralization. The sanitary conditions of our schools are excellent.

One of our non-commissioned high schools will probably call for a commission in the near future, and one of our townships will probably institute a two years' high school course. It is my ambition to assist those high schools that now have a two years' course to a three years' course. This may in time lead to other commissions.

The taxpayers oppose payment of teachers for attending county institutes. I have urged a kindly feeling among teachers to this sentiment, and have insisted upon a desire to transfer to the pupil value received. Hard to show, but it can be done.

I am in favor of placing township trustees and superintendents on fixed salaries, adjusted by advisory boards and county councils. The conscientious man delights in attending to duty; the dishonest man will find something to tabulate and win the day. Very truly,

W. A. STOCKINGER, County Superintendent.

SCOTT COUNTY.

Scottsburg, Ind., September 2, 1902.

Dear Sir—In the line of teaching, we have made an advancement that is commendable. The teachers are better qualified, and more of them attend good schools during vacation, thereby better fitting themselves for the profession. We have aimed to make a careful comparison between those that attend school and educational meetings with those who do not, and find that the former are more earnest and enthusiastic in their work, and the same spirit is manifested by their pupils.

The per cent. of attendance has increased in the past two years. There is a greater desire among a large number of boys and girls to complete the common and high school courses, the gain being nearly 100 per

cent. in the number of graduates; a desire on the part of the parents to have their children better equipped for the battle in life with an education that was denied or not afforded them in the shadowy past; a better enforcement of the truancy law by the truant officer, and the perfect harmony existing among school officials on all school matters.

We have made some progress in centralization of schools and the transportation of pupils, and as far as it has been tried in this county it has been entirely satisfactory to all concerned.

The administration of the schools has been well looked after by the school officials, in visiting schools, presiding at township institutes, assisting and advising teachers as to the best plans and methods in teaching and government. Most of the township trustees visit their schools during the term, and by comparing visits we are the better able to make a just decision as to the retention or rejection of a teacher.

We have erected five schoolhouses in the past two years, and all have been built on the modern plan of light and ventilation. There has been much improvement in the sanitary condition of our schoolhouses and grounds, for a feeling is growing rapidly among all the thinking class that the school should be made more attractive and refined; in fact, "that cleanliness is next to godliness."

Our policy for the future is, that the teacher must be better equipped for his work, love the children and live close to nature; that all the boys and girls be induced to stay in the schools until they graduate from the common schools; that we have a small but well selected library in every school (the Board of Education, at its meeting September 1, 1902, adopted resolutions to push the library work as fast as the financial conditions of each township would permit); that the parent be caused to see that his child should be provided with a sufficient number of books, and be present every day, if possible.

Yours truly,

ELIJAH A. GLADDEN, County Superintendent.

SHELBY COUNTY.

Shelbyville, Ind., September 22, 1902.

Dear Sir—Replying to your letter of recent date, in which you ask as to the general school conditions that hold in this county, I beg leave to submit the following:

As a whole, I feel that the school sentiment existing within the county is good. The patrons of the schools are beginning to understand that they have good schools, when they ask of their teachers such questions as: "Are you a person of good moral character?" "Have you attended for any considerable length of time a school designed for the training of teachers, that our children may have the same guarantee against pedagogical malpractice that we would ask of our surgeons, that we might have guarantee against surgical malpractice?" "Have you had experience in teaching?" "Have you the peculiar ability that will enable you to impart what you know to the children in your charge?" The school patrons of this county, then, have learned that character, scholarship, experience and the ability to impart knowledge are the prime requisites of the successful teacher.

The majority of the patrons of this county, however, have not learned the lesson that country school teacher is "worthy of his hire," for the wages paid teachers in the districts of the county is 91 cents per day for the entire year; a sum that is ridiculously absurd as compared to that received by artisans, tradesmen and manual laborers. It is true that the average daily wages of teachers in the district schools of the county is $2.30 per day for the six months of teaching; but it seems to be the case that a great many persons rather associate this $2.30 per day with each working day in the year, while, as a matter of fact, the unemployed six months of the teacher lowers his wage ad absurdum 91 cents per day. The people of the county, though, I assure you, are entitled to the best there is in the way of trained teachers; and the apparent disregard for all that makes for the best in a school way is explained by one word—thoughtlessness. The mere pittance allowed the teacher, even augmented though it is by the new wage law, makes it impossible for some—the man of family, for example—even to have dreams of greater power for good in the schoolroom through the agency of the normal school and the college.

Further, the demand for trained mind has become so great, that, by the time one has given himself the necessary college training to become a teacher of the highest type of efficiency, numbers of other callings stand ready to take him at a half dozen times greater remuneration than the teaching offers. We must recognize conditions as they exist; and the more quickly the taxpayers and school patrons of the State realize that a great many of those best fitted for teaching adopt other occupations more remunerative, the more readily may the remedy be applied. In teaching, as in industrial pursuits, able men and women will be attracted to it to the degree in which that pursuit is made attractive in all of its conditions, the financial included. We can not either attract the highest type of teaching efficiency by mere promises of something better to follow. The conditions must be very real and absolutely at hand before we can hope to have the best in the above indicated. In the matter of the high schools of the townships of this county, for example, I feel that I have, on several occasions, made myself ridiculous by offering graduates of higher institutions of learning the sum of $3 per day for a period of six months' high school teaching. And, while some of the township high schools of this county are equipped with strong scholarly principals, how earnestly I feel that all of them should be so equipped, that our country children could have just as good high school instruction and just as extended a course as that enjoyed by our city corporations! But if this county will not pay the price, some other county will, and we must to that extent content ourselves to remain mediocre. I hold, sir, that if this community progresses in all lines of industrial activity within the next twenty-five years as it has within the past ten years, the present generations that we have in training will most assuredly not be well and practically equipped for the life struggle that is yearly becoming manifoldly so intense.

As to the personnel of the teaching profession in this county, there is none better, in so far as the teachers have had the opportunity, financial and otherwise, for improvement. I doubt, Mr. Superintendent, whether you can point to any other county within this State that has sent so many students to the higher institutions of learning within the past two years

as has this county. I do not utter the above sentiment boastingly (and really do not know it to be true), but merely to indicate to you my supreme faith in the members of the profession in this county who are struggling, some of them, against great odds herein enumerated, to the end that their intellectual offspring, the common school pupils, may be equipped for the intensive life struggle so soon to follow the completion of the school course.

We have two other school corporations in this county besides the township corporations—Shelbyville and Morristown. The Morristown schools are progressing nicely under the management of Prof. John Rhodes. The high school is very efficient, and all departments work in perfect harmony. The taxpayers in this corporation have learned the secret of securing good teachers for their schools, I may add, incidentally. The Shelbyville corporation has a school system that approaches very nearly the ideal. Prof. J. H. Tomlin is the superintendent, and he knows school needs as few men do. Judging from the standpoint of the teachers' examinations that some of the high school graduates pass, I am convinced that the instruction given pupils in the Shelbyville high school is superior in every respect. All the teachers in the high school, five in number, are highly educated men and women, selected with reference to character and reputation, scholarship, earnestness and the ability to impart instruction. The grade schools of the city are in excellent condition for the reason that, first, all teachers without exception are experienced (no inexperienced teachers are employed in the schools); secondly, no teacher can follow unsafe pedagogical practice, for the reason that close organization and careful supervision by the superintendent preclude all possibility of such procedure. The matter of expression is given special emphasis in these schools by the employment of special teachers in writing, drawing and music. Prof. Tomlin has, within the past two years, inaugurated the kindergarten, which is proving immensely popular, as it should. Happily, Shelbyville has ever had the good fortune to have exceptionally strong school boards, and on this, fundamentally, has rested so securely the success of the entire system.

All the above, then, I hope will give you a true insight into the school conditions that exist in the good county of Shelby. We are progressing along the lines above indicated. The people of this county are eminently a thinking people, and it is characteristic of them that at all times they propose to have the very best in all that concerns the present and future welfare of themselves and of their children.

Trusting that the matter that you would have is all incorporated in the above report, but being ready to augment it at any time by any additional data that you may require, I am, very truly,

J. W. BARLOW, County Superintendent.

SPENCER COUNTY.

Rockport, Ind., August 28, 1902.

Dear Sir—In reply to your letter, calling for a review of the progress of the schools of Spencer County during the last two years, we feel that we can say with some degree of certainty that for the last eight years

there has been a marked improvement in our school work. I wish to give my predecessor due credit for his persistent effort to secure better teaching. He advocated better pay in this county to teachers, and since the wage law was passed, they are doing more to prepare themselves for good service. We have more high school graduates and more young men and women, who are attending higher institutions of learning during their vacations than ever before. Many of these are teachers, and better schools are the result.

Our teachers' meetings are better attended, and all seem willing to contribute more liberally, that the best instructors to be had may be employed.

There is a growing demand of the people for better work. They talk of centralization of schools, and many of them approve of it. They are more willing to pay for improved methods, and know that the employment of poor teachers amounts to extravagance.

There have never been any prosecutions on account of violations of the truancy law. We have had little trouble in getting the children into the schools, when the officer called upon them. The majority of the people now favor the law. Many of them think there is little need of an extra officer to enforce it. They say the teachers and trustees should do that.

We recommend that the county superintendent be relieved of certain duties, that he may give more time to the study of the conditions of the schools. The text-book law imposes much work and responsibility upon him. The time needed to comply with this law could be very profitably used in visiting schools. Very truly yours,

A. C. HUFF, County Superintendent.

STARKE COUNTY.

Knox, Ind., September 2, 1902.

Dear Sir—Yours of recent date at hand, and in reply will say that in the past three years and the present year we are making an effort to impress upon the pupils the necessity of good spelling, accuracy in arithmetic and the correct usage of language; in fact, everything that tends toward a liberal education. We are working to a general revival in high schools.

Yours truly,

GEORGE E. BUTCHER, County Superintendent.

ST. JOSEPH COUNTY.

South Bend, Ind., July 16, 1902.

Dear Sir—In response to your communication of July 2, I am very glad to be able to say that the schools of St. Joseph County are in a very creditable condition. During the past two years more attention has been given to the sanitary conditions in our district schools. Schoolrooms and grounds generally present a much better appearance. However, there is still more to be done. A number of schools should dispose of their old

seats and give the pupils a kind which would be more comfortable. Often we find the seats and desks too high for the children. The appearance of the schoolrooms of several townships should be improved for the benefit of good school work. Our township libraries are growing. Nearly every district has a good selection of supplementary reading for the grades, and in most places we find some good books for reference. We hope to see this work continued.

The problem of the small schools is being studied more by our school officers. A number of small schools have been closed, and the pupils satisfactorily cared for in other districts. The idea of concentration is well thought of by our school officers. More will be done in this line as soon as the people realize the advantages of the principle.

In general the qualifications of the teachers in the rural schools are much better. We have but few teachers who have not had some professional work. Many are also graduates of high schools. The demand for high school work is growing rapidly. Our district schools would be much better if we could retain more of our experienced teachers who are thoroughly imbued with the professional spirit.

Very respectfully,

WILLIAM CLEM, County Superintendent.

STEUBEN COUNTY.

Angola, Ind., July 23, 1902.

Dear Sir—During the past two years several changes of importance have been introduced into the schools of Steuben County. It was the custom for years in this county to divide the school year into three terms, and to employ a different teacher each term, making three teachers in the same school within a period of eight months. Under this plan of employment the results were far from satisfactory: The attendance was poor; the course work could not be covered; the schools were not well graded and supervision was rendered futile. By action of the County Board of Education the schools were all filled last year with teachers employed for the entire year. Good effects of the change have already been seen and stronger results will follow. Long vacations during the school year, which tend to destroy the interest of the pupils, have been abandoned, and the weekly holiday has been changed from Monday to Saturday in nearly all the schools. Under the operation of the compulsory law the attendance has been larger and more regular. The sentiment of the general public is with the law.

In the construction of new buildings the school officers exercise great care as to heating, lighting and ventilating the various rooms. They believe that a good system of heat and ventilation and a proper grouping of lights should be found in every schoolroom. Several houses are now being remodeled and refurnished to meet the advanced thought in school sanitation. The general sanitary condition of the schools in the districts is receiving closer attention each year on the part of teachers and school officers. The recent study of this subject in the township institutes is now showing results in an increased interest in all things pertaining to sanitation. No

great effort has been made to centralize the schools in our county. A few schools have been abandoned where the attendance was small and a saving could be effected, but no systematic effort has been made in that direction. Our people are conservative, and while they wish to adopt any new ideas possessing real merit, they prefer to watch developments in other quarters before making extensive changes. The schools already centralized have met with fair success, and the conveyance of the pupils at public expense has been quite well received by the people.

We have been slow in introducing the vertical system of writing. One or two graded schools of the county which used the vertical system for a time have returned to the slant, seeing no advantage in the vertical; so that now the county is almost a unit in the use of the slant system.

Our needs at present are: Deeper professional interest, stronger qualification and a more strict adherence to the course of study, with the introduction of more supplementary work. We find that each year we have a larger number of high school and normal graduates in our corps of teachers, and our aim shall be to encourage these additions, as being likely to stimulate the school sentiment and add professional zeal to the teaching body of the county. The teachers of successful experience will be retained, and to these the school officers will add such qualified beginners as may be needed from time to time. We shall endeavor to so systematize our work that supervision will be close and effective.

Very truly,

HOMER DILWORTH, County Superintendent.

SULLIVAN COUNTY.

Sullivan, Ind., July 23, 1902.

Dear Sir—The schools of Sullivan County have been gradually but surely making improvement along all lines of work. The patrons, pupils, teachers and school officers have worked harmoniously and toward the same end—the education of the masses. We have found the taxpayers willing to bear the burdens necessary to carry on this work. All they ask is that the teaching be well done, and that the other costs be reduced as low as possible, consistent with the very best interests of the schools.

We have 110 district and fifty-nine town and township graded schools. There are eighty brick and forty-six frame buildings. One of these, built this year, is after the plans and specifications of the State Board of Health. Twenty-eight rooms are heated and ventilated with heaters. The common stove is used in all the other rooms, except Sullivan, which is heated with water.

In the last few years a great deal of attention has been given to the location of houses. The playground in nearly all the district schools has been enlarged to one acre. The site has been chosen on account of the beauty and healthfulness of the place. Single desks are found in a great number of the houses. In every school is a small but increasing library. Reading Circle and miscellaneous books are added to each of these yearly. Last year 1,151 Reading Circle books were added. The total Reading Circle books is 5,019. The members number 3,922, and 9,904 books were read. We have 2,907 miscellaneous books.

A few of the smaller district schools have beeen abandoned. Many of the schools that were located near the towns have been absorbed by them. Three districts will be transported this year. The tendency is to gradually enlarge the districts and transport those that are located favorably. With 225 miles of stone and gravel roads, we are just getting ready for transportation and concentration.

The sanitary affairs in general are fair. The school officers are giving more attention to the cleanliness and appearance of all school buildings. A large number of the districts are supplied with wells. Nearly all the houses have natural slate blackboards. The teaching force is active and alert. About one-fifth are beginners every year. Many of our teachers have had some training in normal schools. They have been faithful in their work. We have tried especially to carry out the work as marked out by the State Course of Study. The township and county institute attendance has been especially good. The great drawback to the work is the continual change going on in the teaching force. About the time a district teacher reaches the point in experience and ability where he can govern, manage and teach a school successfully, he either quits the profession or gets a position in a town or city. This is due largely to the wages, length of term and tenure of office. Last year we had an average of 125 days in the country and 157 in the towns. Until these restrictions can be removed, I can see no way in which we can keep the district school from being the experimental station for young teachers.

The attendance has gradually increased and is growing more regular. Patrons take more interest in the schools, and, as a result, their children attend better. The compulsory law has had a very helpful influence. It has been the policy of the county superintendent to carry out the law, and see that the rules and regulations of the State Board of Education are obeyed. When schools are in session all of his time is given to school visiting. He spends at least one-half day in each district school. In whatever way he can, he tries to assist and encourage the teacher in his arduous duties. He understands fully that teaching is a great business, and that no one man knows it all. So he has tried to work along the line of being a learner and helper rather than that of director and supervisor. In the seven years' service he has never failed to visit each school at least once during each year.

In the last two years we have had F. M. Stalker, Charles A. McMurry, J. M. Greenwood and James L. Hughes as institute instructors. These men have been great sources of inspiration and models to us in our work.

The development of the coal mining industry in the eastern half of the county makes the location of houses a difficult task. The little towns keep springing up around new mines, and very frequently new houses have to be built in order to school the children at these places. The old district is thus changed and frequently can not be abandoned, because the general average is a few more than twelve. We have more houses than are necessary on this side of the county, if they could be changed and properly located. I could name several district schools that are within one and one-half miles of schools from two to four departments. I see no way out of this except to do the best we can for a few years, until mining affairs get settled, and then give the trustee a little more authority in the matter of concentration and abandonment of schools.

I believe that the county superintendent should be relieved entirely of the school-book business. It comes at a time when he ought to be busiest getting his schools properly started and organized. I think he should be placed on a salary. Then it should be the duty of the State Superintendent, with a faculty of competent instructors, to hold a school of at least three weeks every year for his instruction in methods, subject matter, supervision and everything that pertains to every phase of school work. Very respectfully,

RICHARD PARK, County Superintendent.

SWITZERLAND COUNTY.

Vevay, Ind., September 19, 1902.

Dear Sir—In response to yours of the 16th inst., concerning the progress and condition of school affairs in Switzerland County, etc., permit us to briefly state that, with the close of our annual teachers' institute (the success of which was evidenced by the largest attendance of teachers in the history of the county), the selection and employment of our teachers, the work of cleaning and rendering sanitary the schoolhouses, the general organization and preparatory work, is well advanced. We will, on October 6 next, open our ninety-two schools, with an average (based on the May enumeration) of thirty-five pupils to the school. Thus, with our county free of any contagious diseases and an energetic teaching force, we anticipate a prosperous and successful term.

We observe that, during the five years' labor and official relation with our schools, many changed conditions have obtained. Some are vastly improved, among which may be mentioned the benefits derived from the truancy law and its enforcement; the apparent interest and cultured taste for the reading of good literature by our teachers and pupils, through the system of the "Teachers' and Young People's Reading Circles;" the enforced encouragement through our teachers' institutes and educational associations; the more perfect systematizing and grading of our schools and school work to conform to the prescribed State Course of Study; the requirement by law of a longer term of school; the encouragement by the system of common school graduation as an incentive to more thorough and proficient scholarship; the increased standard of scholarship required of teachers, and the manifest interest and support given by the public and school patrons to the school work, etc., all of which has contributed to advance and improve the standard and progress of educational affairs. Yet, with this apparent improvement and profit, we must admit, that we fall far short of the ideal success and conditions so much desired, and it is with some degree of humiliation that we chronicle the negative conditions among which may be enumerated the lack of proper concert of action and co-operation of our school officials; the lack of the proper support given to the progress of the schools and school officials by the County Council and Township Advisory Boards; the lack of professional ambition and normal training of our teachers; the unreasonable and unjust results of our transfer laws; the vicious and lamentable practice of employing teachers for personal and political advantages, rather than for professional

and pedagogical fitness. In this, well may we say, in the language of Lowell:

"This wrong is also done to us;
And they are slaves most base
Whose love of right is for themselves;
And not for all their race."

Yet, notwithstanding the adverse conditions, we note a marked improvement in the school work in general, and, by patient, toiling process of evolution, we confidently believe a more elevated and higher standard of efficiency will obtain. Respectfully,

D. N. HAYDON, County Superintendent.

TIPPECANOE COUNTY.

Lafayette, Ind., September 15, 1902.

Dear Sir—This county has been for years, I should judge, educationally in a prosperous condition. It has been blessed with good, progressive Boards of Education, and there is a good school spirit throughout the county.

In performing the many and various duties incumbent upon a county superintendent, such as examining manuscripts, visiting schools, attending commencements, meeting patrons and school officers, making book reports, holding institutes, etc., it seems that I have had a few definite ends in view. Through all the above work I have aimed at—

1. A higher degree of proficiency and scholarship in the teaching force. 2. The centralization of schools. 3. Correcting the abuse of buying school supplies, such as charts, maps, expensive globes, etc. 4. Maintaining longer terms of school in the different townships.

As to the first—scholarship in the teaching force—I hold that whatever else may be expected, there can be no successful teaching without scholarship. The person who can not pass such examinations as the State provides is not fit to be in a schoolroom. To this end, I have been fairly close in my grading. A great many of the teachers have found it necessary to attend the State Normal and other normals of the State. The effect of this work has been felt all through the schools. There has been more careful, thorough work required of pupils, for, unless the required grades are made, the pupil can not pass. So the patrons hold the teacher responsible for good work. This has been my principal aim during the last two years.

In the matter of centralization of schools, this county has been making steady advancement during the past two years. Our trustees all personally favor the plan and see the benefits, though some realize they are so situated that they can accomplish little. The County Board authorized the publication of a thirty-page pamphlet, setting forth the problem of centralization. These pamphlets were sent to the patrons of the various schools, and awakened much favorable comment. A year ago seven small schools were abandoned. This year eleven more were closed. One township—Washington—has almost complete centralization, two years ago having six rural schools, now having but one. Other townships are contem-

plating such improvements as will admit of consolidation. The most of the schools abandoned were in those corporations where the school term was but six months. The next two years should see centralization general in at least six townships of the county.

In the question of supplies, this county, and I suppose all others, is loaded with thousands of dollars' worth of supplies, purchased during the last twelve or fifteen years. It is not uncommon to find in a school of fifteen pupils four to eight expensive charts, costly cabinets of maps and cards, tellurian globes and other supplies. Often these charts are thrown out into the woodhouse or down into the basement, and at the same time the schoolroom may be poorly seated, may be without blinds, and without other conveniences. The best of township trustees are talked into buying. In fact, the more progressive the trustee, the more likely he is to believe that he will be behind the times if he does not make a purchase. He is probably presented recommendations from all the prominent educators of the State. If educators would consider the practical side of the supply they recommend, they would do a great benefit to the schools. Many supplies, valuable in themselves, are rendered useless by being thrown in upon teachers who have no idea of their use or purpose. Few such supplies have been bought during the last two years. The money has been used to paper schoolhouses, build woodhouses, oil the floors and make walks. The trustees of this county supply all their schools with good paper, pens, ink and lead pencils. We have a county adoption of the rational method for primary reading, and the necessary books for first and second-year work are provided at the township's expense. The trustees provide each teacher with a primary number book, and with a copy of an adopted music book. In some townships music books are provided for the pupils. The trustees consider very carefully the needs of the schools and are not afraid of being called non-progressive if they do not purchase.

The average length of the school term of this county in the townships is between six and seven months. While some of the townships maintain a seven-months' term every year, some are able to have but six months. There are reasons why the school term should be, in my judgment, eight months. The colleges and universities are demanding higher entrance qualifications. This is demanding of the common schools and the high schools a grade of work that is difficult to do in a short term. Then there is a demand that young men and women enter upon their life's work as early as possible. This means that now we must expect as much of students fifteen years of age as formerly was required at eighteen or twenty. Then we are adding certain culture studies to the common school work. The present school term is not sufficient to give the development and growth the pupil should have. Neither is the term sufficiently long to give the knowledge pupils should acquire. Though we have better methods, better systems and better teachers, the common schools will fall short in their work unless the terms can be lengthened. In some townships centralization is already lengthening the term. But most of this work is for the future.

In schoolhouse construction, the county has made much advancement. During the last two years several large school buildings have been com-

pleted or under way. These are models of architecture and school sanitation. The Washington building, at Lafayette, was completed at a cost of $60,000. This is a stone building, complete in every particular. The twelve-room building at Clarks Hill cost about $18,000. This is a splendid brick school building. Fairfield Township erected a two-room building in one of the rural districts. This is a first-class building, embodying the latest sanitary ideas. Wayne Township has under construction a six-room building. The nine-room building, at Battle Ground, was completed about a year ago. All others are modern buildings in every sense of the word. In the rural districts the old buildings are rapidly being replaced by elegant modern buildings.

E. C. CRIDER, County Superintendent.

TIPTON COUNTY.

Tipton, Ind., September 8, 1902.

Dear Sir—In reply to your request for a statement of the progress that has been made in this county during the last two years in school affairs, I wish to submit the following:

One district schoolhouse has been erected at Jackson, and an addition with two schoolrooms, a library-room, and a laboratory-room has been built to the Kempton high school. Each of the above buildings has a basement and is heated by a furnace. Due attention, also, has been given to the proper lighting of the rooms in the above buildings.

In the last two years the trustees have improved the condition of many of the old schoolhouses by the use of tints on walls and ceilings, by the use of window shades to regulate the light, and by the removal of the double desks and the reseating of the rooms with the single desks. Teachers have also contributed freely to the appearance of the rooms by decoration.

In the last two years four district schools have been abandoned and the children placed in other districts, near enough that no transportation for the pupils was needed.

An attempt has been made to advance the standard of the teachers. Each year about 20 per cent. of the teachers are inexperienced, but most all of these are either graduates of a high school or have had at least some high school work.

I feel that the trustees should continue in the future the work of improvement of buildings, and the abandonment of the small school. Higher wages should be paid to the teachers, who will thoroughly equip themselves for the profession, and a better assurance be given them that they will receive employment each year, thus encouraging them to remain in the profession. At least a four years' high school course or its equivalent should be demanded of the young applicant before he can enter the profession. Yours truly,

L. D. SUMMERS, County Superintendent.

UNION COUNTY.

Liberty, Ind., August 29, 1902.

Dear Sir—In accordance with your request for a letter, giving the condition of the schools, their improvement along all important lines, and plans for further advancement, I will give the desired information along the lines mentioned in your letter as best I can.

That a just understanding may be had in comparing this county with the other counties of the State, I think that it should be stated: That its area is only 168 square miles; that the Rude Farming Implement Factory is the only large manufacturing establishment; that there is not any large city, but that the land is good and in a high state of cultivation, as is shown by the total assessment, which was, in 1901, $5,667,605, and from the fact that we have, for the past twenty years, lost about 50 per cent. of our State school tax in the State's distribution of tuition revenue.

To give anything valuable on the important matter of consolidation, it will be necessary to give the schoolhouses and their location and condition of the several townships. The proper location of schoolhouses has been very difficult in the three western townships—Brownsville, Liberty and Harmony—on account of the east fork of Whitewater River flowing through them. In the west half of Brownsville township, accommodating more than half of the people, are four schoolhouses now in use—three brick and one frame—all comparatively new and in good condition. One of these, located at Brownsville, is a beautiful four-room brick. One district east of this place and one west have been abandoned and the pupils attend this school, in which three teachers are employed. There is a schoolhouse about a mile north of Brownsville, which might be abandoned and the pupils sent to this graded school, if it were not for a very dangerous railroad crossing on one road and a dangerous river ford on the other. Some effort is being made for an overhead or an underneath crossing of the railroad. On the eastern side of the township, on or near a pike which extends through the township from north to south, bearing slightly east, are three old frame schoolhouses, which the trustee keeps in comfortable condition. When the consent of the patrons can be had, the trustee will build a two or three-room house on this pike at a point about half way between the north and south lines of the township, and abandon the three old schoolhouses. There is a little town—Clifton—near this point.

Liberty Township, just south of Brownsville Township, has four schoolhouses—two east of the river and two west. The eastern houses are excellent and comparatively new. One of the western houses is an old frame, and the trustee is arranging to build a new house in its stead. The other western house is a fine brick of eight rooms. It was built somewhere near forty years ago, for an academy, but the architecture was so good that it still looks modern. After serving for many years as the home of the Whitewater Academy, whose influence is still felt in the community, the township trustee purchased it. Three rooms have been in use for several years. One district was abandoned, and the pupils attend this school. It is located at Dunlapsville. There are no further consolidations practical in this township at this time.

Harmony, the southwestern township, has one beautiful new frame house and two poor old frame houses east of the river. The trustee is preparing for a new house, and may arrange to accommodate both districts with one building. There are two old frame houses, which have been kept in such repair as to make them comfortable, west of the river. And when a new house must be built, the two districts will probably be thrown together.

While there are some important creeks and some broken land along them in the three eastern townships—Harrison, Center and Union—the greater portion of the land is level, and the schoolhouses were practically built on the old plan of a house accommodating a district two miles square. All the houses of the three townships are excellent brick buildings and comparatively new. Harrison Township has a fine two-room building. Center Township has a very commodious three-room building, located one-half mile south of Lotus, and a beautiful new two-room building. Each of these buildings took the place of two others, which formerly accommodated the people of this territory. Union Township has a fine two-story house, but the upper room belongs to the civil township, so that her schoolhouses are all single rooms. She has, however, abandoned one district, and the pupils will be distributed to other schools.

The trustees and directors look after the schoolhouses carefully; see that they are made comfortable for the beginning of school, and kept so throughout the year. The house at Brownsville is heated with a furnace, and also the house at Philomath, in the same township. This is the only single-room house in the county which is heated with a furnace. But it has proven to be the most satisfactory way of heating the single-room buildings, as well as those of more rooms. And as the price is gradually reduced, furnaces will be placed in the district school buildings. All the other district buildings of the county are heated with wood stoves, jacketed where the size of the school requires some pupils to sit near the stove. The district schools are well supplied with apparatus in fairly good condition. Many of the charts and maps are old, but yet found to be useful.

I think each district has a start on the Young People's Reading Circle Library, and many districts have a fine collection of these books. I believe all the trustees are supplying their schools with the Home and School Visitor as supplementary reading. There is not any practical use made of the township libraries; partly, I think, because reading matter has become so plentiful that people will not go to the places at which these libraries are kept to get books, and partly because many of these books are out of date. I do not know how these books could be made of any benefit to the pupils, except to distribute those that are still useful to the districts and have them cared for along with the Young People's Reading Circle books.

The enumeration was, in 1900, 1,715; in 1901, 1,666; and in 1902, 1,626. This shows a continued decrease. And this has been true of the county for many years. I think this is mainly due to two causes: The enlargement of farms; as the improvement in farm machinery has continued to give a farm hand increased power to perform labor, the farmers have continued adding to their farms until some men are holding very large

tracts of land in the county. One man was said to own 1,500 acres; another almost as much, and a few others from 800 to 1,000 acres each, and many 200 acres or more each, and as there were not manufactories here to give the displaced men work, they sought employment elsewhere. The enrollment was, in 1900, 1,436; 1901, 1,395, and in 1902, 1,339. I think the decrease in the enumeration explains the decrease in the enrollment. The average daily attendance was, in 1900, 1,038; in 1901, 1,042, and in 1902, 974. This shows a decrease from 1901 of sixty-eight, the principal part of which was caused by the widespread sickness which prevailed from about the middle of the winter until the close of schools. The measles swept the county; there was a good deal of scarlet fever and scarlatina, and two families in Harrison Township and one in Brownsville Township has smallpox. The necessary closing of schools, that were in danger, by the health officer, and the reasonable fear that this last dread disease produced, interfered considerably with our attendance. And, on account of the delay caused by closing schools and the light attendance, terms of school were curtailed as follows. Brownville Township, two weeks; Harrison Township, an average of three days, and College Corner Union School, one week. The attendance was remarkably fine until the sickness began.

We have five non-commissioned township high schools—one in Brownsville Township, one in Harrison Township, two in Center Township, and the one located in Liberty Township is a joint high school for Liberty and Harmony townships. We do two years of the regular high school work in these schools, and pupils who desire to go on receive full credit for this work in the commissioned schools of Liberty and College Corner. And the trustees pay tuition to the commissioned schools for the pupils who desire to complete the high school course. Union Township has united with West College Corner, so that the College Corner Union High School becomes her high school, and her pupils have the advantage of the full course. Thus, every pupil in the county, who desires to do so, may secure a complete high school education free of tuition.

In reference to the management and work of the schools of the county, we endeavor to conform to the system of the State and follow the State Course of Study as closely as possible, and teach by the methods in general use throughout the State.

The scholarship of our teachers has improved each year, not only for the past two years, but, at least, from the establishment of county superintendency, in 1873 and, possibly, for many years before. And so far as I can learn from talking with institute instructors, county and city superintendents, I believe that the teachers are equal to those in the other counties of the State. The thing toward which I have made greatest effort for several years past is to induce common school graduates to complete the high school course, as I see that at least this much education is necessary to enable a young person to succeed in almost any line of life work. And I believe a good sentiment in favor of this has been aroused and is gradually growing.

For the past five years we have given considerable attention to the handling of music in the district schools by township superintendents of music. It has been tried in Union, Center, Liberty, Brownsville and Har-

mony townships, and met the approval of a majority of the patrons in all of them. And from these five townships we have averaged three townships for the past three years that have had music on this plan.

Yours truly,

C. W. OSBORNE, County Superintendent.

VANDERBURGH COUNTY.

Evansville, Ind., July 19, 1902.

Dear Sir—The most important feature of the work in the district schools of Vanderburgh County will probably not be very interesting matter for legislators, because it has nothing to do with statistics or truancy laws, except in a collateral way.

To understand thoroughly what has been done, it is necessary to explain the conditions which made some kind of a revolution necessary. After studying the conditions carefully for two years, I found the main fault in the schools to be due to a lack of system. I found that the work done by a sixth grade in one school was frequently altogether different from the work done by the same grade in another school. All over the county, the most prominent and most aggravated fault was the overcrowding of children. Pupils who could hardly do fifth grade work were trying to do seventh grade work. It would seem that there could be but one cause for this—inefficiency of the teacher—but I found some really capable teachers who were doing this, and who gave as their reason that the parents objected to their children being put back.

Up to this time, not much attention had been paid to the "Bi-Monthly Examinations." If the teacher felt that she had time, and that the school needed it, an examination was held; if not, it was not held, and the pupils were promoted on the judgment of the teacher. The first step taken was to appoint specific days upon which each of the three examinations was to be held, and to insist upon them being held accordingly. The promotions were to be based upon the results of these examinations. The next difficulty met was that some teachers would not grade fairly. Pupils who had not made more than 20 per cent. were given 80 per cent. and 90 per cent., these teachers again giving as their reasons that the children's parents did not like to see such low percentages. In this county the schools are not far from each other, and in one township, where the schools are closest to each other, with the consent of the trustee, I tried the plan of having the teachers change schools on examination days. By this arrangement the teacher of, say School No. 7, would go to School No. 4, hold the examination, grade the papers and return them within two weeks to the regular teacher of School No. 4. All differences of opinion in regard to marking were to be referred to me. This plan was very successful from the first, and was adopted throughout the entire county the following year.

Then we had trouble with the questions. We were using the questions which were prepared by a committee of county superintendents and sent to us by the State Department. According to the rules, these questions were to be given exactly as they appeared, none were to be omitted

and none substituted. Under this test we found that these questions were faulty—some were not taken from the work they were intended to cover, while others were silly. To overcome this, we decided to prepare the questions ourselves. Accordingly, different teachers were directed to prepare questions on the various branches and send them to me; and from these I prepared the entire set and mimeographed them. This practice still obtains.

Before the year was ended, we found out that we could not do the work as outlined in the State Manual. So we had to arrange a new course of study. Last summer, with the aid of some of our best teachers, I arranged a course and this was followed in the county last winter. Naturally the first course was not satisfactory in all respects; and the great problem before us now is the arrangement of a satisfactory course of study. All other considerations are made subservient to this. We now have but two examinations each year, the promotion of the pupils being based upon these and their class standing, each counting half. The average length of school term in this county is about eight months, and we are now trying to arrange a course which can be completed in about six months. This is our work for the summer.

Very truly,

JAMES F. ENSLE, County Superintendent.

VERMILLION COUNTY.

September 1, 1902

Dear Sir—In the past two years we have established township commencements, township joint institutes and county oratorical contests, with the idea of arousing a still greater interest in educational affairs. The rural schools of the county are all working under the same program, enabling parents and school officials to visit the school and witness any special work done, and not mar the program of the day. The program has been published in the county papers, so parents may know what is going on any hour in the day, and are thus permitted to visit any section of the work which they are especially interested in.

We have consolidated schools in two townships, and the new plan works admirably. Next year we hope to, and have arranged for the consolidation of several schools in Helt Township, and are looking forward to better organization and better results in school work, as we more nearly perfect our plan of consolidation.

We are this year starting out a high school institute, which will hold monthly meetings. This institute is composed of the principals and superintendents of the commissioned and non-commissioned schools of the county, and its purpose is to lead to more uniformity of work, and discover or devise new plans of getting more young people into high school, and ultimately to college. These institutes will be carried into all the town corporations of the county. On the whole, we think the educational work in good condition, but are laboring with the hope of still better things.

Yours, very truly,

E. E. HELT, County Superintendent.

VIGO COUNTY.

Terre Haute, Ind., September, 26, 1902.

Dear Sir—In compliance with your request, I herewith submit a review of the progress in the school work of this county.

Conscious of the impracticability of a close personal supervision of the teachers of our schools, due in part to the many clerical duties which are incident to the work of the superintendent, the Board of Education has acted favorably on a number of suggestions which have in view the immediate betterment of our teachers. In addition to this material assistance, the superintendent has taken charge of certain work, which has for its object the same purpose. A brief discussion of these points follows:

At the annual meeting of the Board of Education, in September, 1901, a rule was passed which provides that applicants for positions to teach must have completed one full year's work in some reputable professional school, which has for its object the training of teachers; provided, that applicants who have successfully taught for two years within the five years immediately preceding their applications shall be exempt from the provisions of the rule. The result is that, at the present time, every teacher in the county, with the exception of three, whose cases are covered by the proviso, have had at least one year of professional training. Many of our teachers have gone far beyond the requirement of the rule and have completed the whole or major portion of the course in some professional school. The character of the teaching of these persons is in marked contrast to that which has heretofore been given by the teachers who had no professional training. In continuation of its work, the Board of Education, at the same meeting, passed a rule which provides that one day in every school year shall be allowed to the teachers for visitation of other schools, and no diminution of salary shall result from such visitation; provided, that in all cases the visitation shall be under the supervision and control of the superintendent. For the purpose of carrying into effect the provision of this rule, the teachers of the county were assigned to certain schools, which were selected because of the effectiveness of the work and the convenience of getting to them. The testimony of the teachers and the observation of the superintendent has been that much good has come from the operation of this rule. In many cases the teachers asked for other days for the purpose of visitation, agreeing to make up the time at the close of the term.

During the past vacation, the superintendent, together with the trustee of one of our townships, perfected an arrangement with the trustees of the State Normal School for the formation of a Model School for Observation and Training of Teachers. A district school, situated on the street car line, six miles east of the city, was selected for this purpose, and after remodeling the building on modern plans, the school was opened on the 8th day of September, in charge of a former teacher in the training school of the State Normal. In addition to the requirements of the State Normal, this school will be used for the purpose of observation by the teachers of the county who desire to see rural school work of the highest character.

Supplementary to the work which is usually done in the preliminary

institutes, the superintendent inaugurated a plan two years ago of calling to his office before the opening of the schools all persons who have never taught, but who had been selected by the trustees for positions in the different townships. The day was spent in discussing the work of organization and management of schools, the course of study, township institutes, the use of educational papers, etc., etc. The meetings have been largely attended, and great interest has been manifested by those present in the discussions. In the future, two days will be given to this work.

The county has experienced a marked advance in the improvement of the school property. Many of the old houses have been thoroughly repaired, and modern systems of heating and ventilating have been installed. The papering and painting of the houses and the beautifying of the grounds has been general. In the construction of the new houses competent architects have been employed, and the county has now some of the best houses in the State.

The attempt to consolidate the smaller schools has not met with favor among our citizens. The conditions for consolidation exist in many parts of the county, and the work of the schools would be greatly improved by the abandonment of the small schools and the transportation of the pupils to other buildings.

An active interest has been taken in providing high school accommodations for the graduates from our common schools, but the desire of many of our patrons to educate their children in the State Normal, Rose Polytechnic or Terre Haute High School has interfered with plans for an extensive system of township high schools. A large part of the work in the higher branches is done in the town and township graded schools.

Our truant officer has been very active in the performance of his duties, and what he has done shows the possibilities of the office if the law would provide a sufficient number of persons to enforce it in all parts of the county.

A few suggestions for needed legislation in the interest of our schools are here given, with the hope that they may assist in removing some of the defects in the administration of school work:

The county council should be compelled to appropriate sufficient funds, and the county commissioners should be required to allow from such funds an adequate compensation for an assistant to the superintendent. By this arrangement the superintendent would be relieved of a large amount of clerical work, some of which has no relation to his duty of supervision of the schools.

The examination of applicants for teachers' licenses should be in charge of a board, under the control of the State Superintendent. The time of the county superintendent which is now given to this work could be used in advancing the standard of teaching in his county.

Appeals to the county superintendent from the decisions of the advisory board on all school questions should be permitted. In many cases this would prevent an injury to our school system, by modifying the action of a board which refused to levy a sufficient school tax or enter into a contract for a needed improvement.

The township trustees should be given more authority in the abandonment of small schools, and the right of the people to have the schools re-

established by petitions should be denied. A law of this nature would make it possible to have consolidation in our county where it is now a failure.

The power of the patrons in a school district to prevent a trustee from employing a person to teach without filing and proving charges of immorality, incompetency, etc., should be removed.

Provision should be made for a greater number of truant officers in the districts outside of the cities, and these officers should be appointed by the county superintendent.

In conclusion, I desire to say that our county has efficient, energetic and progressive trustees, who are in many ways responsible for the excellent conditions of the schools in their respective townships; our teachers exhibit a splendid school spirit and work zealously for the advancement of the schools, and our citizens are, in general, strong supporters of our school system.

Very truly yours,

CHAS. F. GROSJEAN, County Superintendent.

WABASH COUNTY.

Wabash, Ind., September 11, 1902.

Dear Sir—We think our schools have made considerable progress during the past two years. The school spirit never was better, and it seems that harmony prevails. The school officials, teachers and patrons are alive to the issues of the day, and are endeavoring to make the school respond to the times.

Wishing to raise the standard of teachers, the County Board of Education at its regular meeting, June 4, 1900, passed the following resolution:

Whereas, The need of a higher standard of teachers is pressing itself upon us, and

Whereas, The study of the common school branches is insufficient to give teachers that depth and breadth of knowledge necessary to the best teaching of our boys and girls, be it

Resolved, That hereafter the trustees and school boards of this county will employ only those teachers who have completed the four years' high school course, or have graduated from some reputable school that is doing at least the equivalent of a four years' high school course.

This resolution was unanimously passed. Each trustee of each school board being heartily in sympathy with the idea, has adhered strictly to the rule, and consequently we have but few teachers in the county who do not possess a high school training. This resolution has done a great deal for our schools, not only by raising the standard of teachers, but also by creating a desire for high school training.

The idea of organization is well developed in this county. Our efficient board of township trustees has made the township principal really a township superintendent, who has authority to supervise the schools of his township. This action enables us to keep a closer watch over the promotions from one grade to another. Promotions from grades five, six

and seven are now made under the direct supervision of the county superintendent. Our promotions are made in accordance with the following plan:

Questions are prepared by a committee of teachers in each township for examination in all subjects studied in the fifth, sixth and seventh years. These questions are edited and printed under the direction of the county superintendent, and distributed to the several township principals, where they may be obtained upon request of those teachers who have classes completing any of the several years' work. When any class has completed the work of either of these years, it is the duty of the teacher to apply to his township principal for a list of questions bearing upon the work done. (The questions are based on the course of study and contain nothing not found therein.) The papers of the pupils, after being graded by the teacher, must be submitted to the inspection of the township principal. This plan has worked well and is beginning to bear fruit. The pupils understand that they must stand on their own merits, hence they do better work. It is also found that when pupils arrive at the eighth year under this plan they are able to do the work required in one year.

As to the organization of our high schools, will say that we are enjoying the good results of county uniformity both in course of study and in text-books. This uniformity is proving advantageous to the pupils, since work done in our non-commissioned high schools is accepted by the commissioned high schools. This concession on the part of the commissioned schools was made because our pupils in non-commissioned schools receive the credits for their work in accordance with the following plan:

Questions are prepared by the township principals. One principal will make questions in algebra, another in botany, another in English, etc. These questions are sent to the county superintendent, who has them printed at county's expense. Each township principal is supplied with questions, and on the day appointed holds an examination in his township. The principals send manuscript to county superintendent, who immediately returns them, sending the manuscript in each subject to the principal who made the questions in that subject for grading. The township principals grade the manuscripts, after which they meet with the county superintendent and report the result of the examination. The county superintendent records this result in books kept for that purpose. Credits are then issued to all pupils who have done satisfactorily the required amount of work. The high schools of our county are doing excellent work. We graduate no one from high school until he has completed the four years' course.

We have erected some good school buildings in this county within the past two years. Much attention has been given to heating and lighting. Our trustees and school boards feel the necessity of observing sanitary principles, and have done so in the construction of our buildings.

The idea of school centralization, or rather school consolidation, has reached this county. Within the last year we have abandoned a goodly number of our small, expensive, and sadly inefficient schools and have consolidated them with other schools. In Waltz Township, this year, three small schools have been discontinued, and the pupils are being transported to Somerset. Usually the people are opposed to the idea, but after investigating the plan they give their consent. Our people are beginning

to realize that the small school is a real problem, and they seem to think that consolidation is a reasonable solution. Our next Legislature should give us definite legislation, legalizing the payment of money for the transportation of pupils.

The greatest need of the schools of this county is a longer term. We are now centering our efforts upon the idea of increasing the length of our school term. We desire to have at least eight months. We have a good high school in each township. Many of our high schools have complied with every requirement of the State Board for a commission, except the length of term. Consequently, we feel that nothing short of an eight months' term will suffice. Our plan to secure this longer term is to abandon our small, inefficient schools and apply the funds so saved towards extending the terms.

Hoping this to be the information desired, I am,

Very truly yours,

JNO. W. LEWIS, County Superintendent.

WARREN COUNTY.

Williamsport, Ind., August 29, 1902.

Dear Sir—In reply to your communication of recent date, concerning the condition of the schools of Warren County, Indiana, I beg to make the following answer:

We believe one of the most important factors of the school is the teacher. The teacher has it in his power to mould the sentiment of the entire district in which he teaches, so far as the various phases of school work and all that pertains to the school is concerned. Believing this to be true, we have set about to improve the school in every line by improving the teacher, or rather, having the teacher become more proficient in his work. The ability the teacher manifests in his management of the school is one standard of determining his value as a teacher. The teacher is to be judged more by what he can and does do with his pupils than by what he can put upon a manuscript in an examination. Taking the teachers of our county as a whole, we can say that there is an improvement steadily going on. Most of them are attending some normal school during the vacation season.

The work in the past two years has been fairly satisfactory. The daily attendance is much better and more uniform since the advent of the compulsory law than it was before the law was enacted. But the people themselves are becoming more interested in the matter of education and showing a greater desire to have their children get the full benefit of our public schools. The law should be so amended that there will be no doubt as to its full meaning. It should require the parent to notify the teacher as to why the pupil is absent. This would enable the teacher to know whether or not the truant officer should be sent for.

We are trying to make the sanitary conditions of our schools as good as the present system of the district school permits. Particular attention is given to the seating and the arrangement of the interior of the schoolroom. But with the old-fashioned schoolhouse not much improvement over the old way can be done.

I think it much better to have the schools centralized, and instead of the old-fashioned school buildings, have new buildings, constructed on modern plans. This would insure the best methods of sanitation to be employed, and would be a great advantage to the educational interests of the entire county and State.

Adams Township is now trying the plan of school centralization, having permanently abandoned three of her district schools and building an eight-roomed school building at the town of Pine Village. This building is being constructed on the best and latest designs, with a view to its convenience for lighting, heating and ventilation. If the plan proves satisfactory other townships will adopt the plan.

We will have fewer schools this year than in former years because we are eliminating as many of the small schools as we can and joining them with other districts. I think the time is not far distant when Warren County will fully adopt the idea of centralizing her schools. We are building more gravel roads each year, and this, with removing the prejudice that some have to centralization, will bring about the complete centralization of our schools.

Our present corps of trustees is very much in sympathy with the educational interests of our county, and are working for the raising of the standard of both teacher and school. One feature of our policy for the future is to have a good township graded high school in each township that is able to maintain such a school. We think it better to keep the young people at home as much as possible. By this we mean to develop and preserve their taste and desire for country life rather than increase their desire for city life. It should be possible for each child to be able to get a good high school education in his own township. It seems that many of our young people leave their country homes and embrace town or city life in preference. This should not be. This desire often comes by having attended high school in some town or city for three or four years. The farm needs the best of minds and the best and most highly cultivated brains. By proper methods we can inculcate a desire for rural life which will not only improve the condition of the social elements of the rural districts, but will make country life even more attractive than city life.

The improvement of the teacher is also important. Through the teacher much can be done to raise the standard of our schools. The value of the child is so great that the best that can be given it is none too good. This is meant principally from a standpoint of teaching. The teacher should have some normal training before he assumes the duties of a teacher. Some of our best teachers are leaving the profession and engaging in other lines of work that is more remunerative their places must of necessity be taken by less experienced teachers. This is not the best for the schools.

By having fewer schools we would as a matter of course need fewer teachers. This would give longer terms of school and would result in better wages. By this method we believe we could secure and hold the very best teaching talent, thus making our schools what they should be and what our ideals conceive them to be.

Yours truly,

W. J. BADER, County Superintendent.

WARRICK COUNTY.

Boonville, Ind., September 18, 1902.

Dear Sir—In reply to yours of recent date, will say the late wage law has done much toward awakening the teachers of our county to the fact that they are recognized by our State lawmakers as an important factor in the general make-up of the State, especially in the educational advancement that may be reached and has been a powerful agency in leading the teachers to see that, in order to retain this feeling by succeeding Legislatures, it is absolutely necessary for them to attain a higher degree of efficiency for their work; consequently, we have had more students in the colleges, universities and normal schools during the past two years than during any other period of two years within my recollection. We have had a closer study of the Teachers' Reading Circle works, more collateral or supplementary work and better attendance at county institutes and teachers' gatherings than we ever had at any other period of like length, and as a natural result our teaching ability has advanced accordingly.

It is my opinion that if the same degree of importance is attached to the teacher's profession by the incoming Legislature as was by the last one, within the next few years the general public will become so interested in the school work that a higher degree of educational qualification and a course in professional training will be demanded of the applicant to teach; consolidation of district schools will be made at the request of patrons, and township supervisors, working under directions from the county superintendent, will be had as a matter of necessity; and the wages paid to the teaching profession will not be begrudged.

These are things most needed and most to be wished for.

Yours truly,

JAMES R. WILSON, County Superintendent.

WASHINGTON COUNTY.

Salem, Ind., September 2, 1902.

Dear Sir—Replying to your request for a letter from me, setting forth school conditions in Washington County, I respectfully submit the following:

Washington County measures in the extreme distances twenty-five miles across in either direction and has a population under 20,000. The wealth of the county is assessed at $7,752,975. There are thirteen townships and seven incorporated towns. Many communities are isolated by reason of hills, streams and bad roads.

Most of the schoolhouses are old and located in undesirable places. The school property is valued at $92,830, almost one-half of which is in two corporations. The school population of the county is enumerated at 6,183, and enrolled at 5,313, the enrollment being 86 per cent. of those enumerated. The average daily attendance is but 76 per cent. of those enrolled, a condition due partly to epidemics and bad roads.

This county has 135 schoolhouses and 160 teachers. Three townships and four towns support high school courses, and three more high schools will be organized this year. Three years ago there were but three schools in the county offering more than the common branches.

Efforts to centralize the schools have been made in different townships, three of which are preparing to build for graded schools. The success of these will lead to a general movement for centralization. A township high school will be organized at each central point. One of my efforts is to secure a central high school offering township high school graduates the junior and senior courses of commissioned high schools.

Fully two-thirds of the teachers of the county were students at universities, colleges and normal schools during the spring and summer. And nearly every new applicant for license was in school during the past year. By this means the teachers have raised their scholarship grades perceptibly. In more than a dozen cases old teachers have raised their scholarship grades 5 per cent. or more over last year. This was done under a rigid standard of grading, applied to all alike.

Every means possible is used to secure successful county institutes. A man of national reputation is secured each year, and a sufficient number of other speakers to occupy all the time of the sessions. This year I had four instructors, all specialists, each of whom spoke twice daily. A program for each evening was also provided.

The number of graduates from the common schools increases each year, reaching a total of 145 in 1902. Local commencements are held wherever practicable, and the Saturday following the county institute is set for the county commencement. The graduates have been addressed by men of State and national reputation each year.

Very truly yours,

JOE C. BUSH, County Superintendent.

WELLS COUNTY.

Bluffton, Ind., September 1, 1902.

Wells county has 124 teachers, exclusive of Bluffton. Of this 124 thirty-six are teaching in graded and high schools. All the school buildings are brick and fairly well equipped. There are five township graded high schools, employing twenty-one teachers, which have a complete high school course of three years, and normal and college men as principals and assistants. These schools are gradually drawing the better students from the surrounding districts into the grades, and drawing the seventh and eighth grades and common school graduates from the entire township. There are six graded schools, employing fifteen teachers, doing some high school work in addition to the common branches. The instruction in these schools is thorough and stimulates the students to greater and higher attainments. All pupils who have completed six years' work in the district schools should attend these graded schools, thus reducing the number of grades in the district school and increasing the attendance in the graded schools, where better accommodations may be had. The policy of the County Board of Education will be directed toward accomplishing the

above mentioned result. As the high school extends its influence over the entire township, a law should be enacted permitting the high school department of the township graded school to extend its term beyond the term of the district schools, that these high schools may be commissioned, thus permitting its graduates to enter the colleges unconditioned.

Wells County is not moving rapidly toward centralization. But three schools are transported, although more than 25 per cent. of the pupils in the country districts are enrolled in the graded schools.

ROBERT W. STINE, County Superintendent.

WHITE COUNTY.

Monticello, Ind., July 10, 1902.

Dear Sir—The work in the public schools of White County for the past two years has, in the main, been an attempt, on the part of all concerned, to rationalize the classification and gradation of the rural schools: to root out the rutty, mechanical school-keeping; to environ the pupils with a healthy, home-like atmosphere; to eliminate small schools; to impress the fact that text-books are only means to a very limited degree, etc. The classification and gradation of rural schools, in conformity to the Uniform Course of Study, has been a difficult problem.

To attempt to reduce eight grades to four, and thirty-two classes to sixteen, meant confusion, and, in some instances, dissatisfaction. In many instances the weaker pupils were unable to carry the work of the next class above, or the pupils of the advanced class found the work too easy when combined with a lower grade or class.

Some of the teachers were inclined to omit some of the subjects—spelling, writing, reading, etc.; while others sought the remedy by alternating. Neither plan has been entirely successful nor satisfactory. At the close of the schools in 1900, we attempted to re-grade and re-classify. This was hard to do, however. As a rule, we were able to eliminate from two to eight classes, which made a marked difference in the work last year. Yet, the fact remains that we have at least eight classes too many. In my humble opinion there are but two ways out of the unfortunate situation; that is, by consistent centralization and exchange of grades by grouping.

Centralization of small schools has been very successful and satisfactory in this county. In 1900 eight were abandoned; in 1901, six; and this year, eight. Only one new district has been added within the past two years. The plan of exchange by grouping has not been tried here, yet, I believe the plan feasible. It is unfortunate for the schools and a self-inflicted injustice to the teacher when he or she fails to advance with the educational spirit; becomes fixed in his pedagogical ideas; blind in his own conceit, he allows the eliminating flood of time to sweep him from his place, when he ought to be of the greatest service to the schools; hence, an annual loss of what ought to be exceptionally fine teachers.

As a rule, nearly all the district schoolhouses are reasonably well lighted, and can be ventilated fairly well. The heating problem has given us more concern. The ordinary stove is the only means, and, consequently, does not heat the room uniformly. It is our opinion that stoves are, and

will continue indefinitely to be, inadequate, and as hot air furnaces are very expensive and not wholly successful, the prospects for improvement along this line are not flattering.

As a rule the new schoolhouses are modern and comfortable. However, there ought to be some standard uniform requirements, inasmuch as the trustees find it difficult to get their advisory boards to accept the new order of affairs, and to make the necessary appropriation for the extra cost over ye olden time barn houses.

The interest and attendance in our schools are good, and have shown marked improvements each year in the very face of the facts that numerous contagious diseases have invaded every school corporation in the county.

In 1899 the per cent. of attendance was 90, in 1900, 92, and in 1901, 93½. There are several reasons for these improvements. First, better teachers, better school spirit and accommodations generally and the enforcement of the truancy law. Music has been taught in our schools for the past five years, with telling results. It has been of special benefit in the general discipline of the schools, i. e., government, co-operation, harmony, correlation with other subjects, etc. As a governing factor alone, it is worth more to the schools than all the whips in the State. From a moral and social standpoint it is of greater value to the pupil than any other subject in the course. The teaching of music should be obligatory in every school in Indiana.

It is my intention to give particular attention to the method of the recitations this year. With the great number of daily recitations there is a tendency toward mechanical rut-work; a lack of preparation on the part of both teacher and pupils; a too general assignment; the illogical unfolding of the subject-matter and mind-activity, and a tendency to a close adherence to the context of the lessons instead of a reasonable liberal application.

Very respectfully,

T. S. THORNBURG, County Superintendent

WHITLEY COUNTY.

Columbia City, Ind., September 1, 1902.

Dear Sir—The school situation in Whitley County is encouraging. The new wage law has been conducive of some gratifying results. Successful and experienced teachers are remaining in the profession longer, and more extended and systematic preparation is made by those who contemplate teaching. In nearly every township the best teachers are paid higher wages than the minimum required by the law. The feeling to maintain the wages and demand corresponding service from the teachers prevails among patrons as well as officials. In the future administration of school affairs it should be the purpose to continue the encouragement of this spirit.

One of the most noteworthy tendencies in the county is the consolidation of the smaller schools. Four years ago one school was abandoned in Etna Township. The next year Union followed with one school, and two years ago Troy abandoned one. Last year Cleveland, Thorncreek and

Union each abandoned one more school. This work was experimental and has proven so satisfactory that this year Columbia and Thorncreek will each abandon one more school, Union two, Richland three and Etna Township consolidates its entire system in a splendid new building at the center. It has been the plan to urge consolidation so far only as the sentiment of the people would support the movement, and in this way results have been accomplished without unnecessary strife. As evidence of the success of this plan it may be said that the popular petition for the consolidation of the Etna Township schools was signed by 95 per cent. of the patrons. The improvement of the roads now in progress, the gradual decrease in enumeration in many rural districts, and the growing sentiment for better school facilities will keep alive the question of consolidation.

Growing out of this question is the problem of the township high school. Two years ago there were three township high schools, but one of which had a defined course of three years' work. There are now seven of these schools, which, with the three schools in the corporations of Columbia City, South Whitley and Churubusco, give high school privileges to every township in the county. The text-books used and the courses of study in these schools are uniform. The principals meet regularly in the county superintendent's office, questions of interest are discussed and committees to prepare uniform examinations are appointed. The graduates of schools providing two years in instruction are admitted to the third year in the neighboring schools, and these again are promoted to the senior class in the commissioned high schools in the county. In a few townships the entire eighth grade attends the central school, furnishing their own transportation, thus promoting their own educational advantages, increasing the working power of the graded school, encouraging the sentiment for centralization, and relieving the distended course in the outlying district schools. It should be the purpose of the coming administration to encourage this policy. If, through proper management, where total consolidation is impracticable, the seventh grade also should avail itself of the advantages of the central school, the benefit to both high school and district work would be inestimable.

In keeping with the spirit of uniformity, the trustees have organized and meet in the superintendent's office once a month. Questions that concern the schools, roads, the poor, etc., are discussed, and upon all decisions possible they act as a body. No supplies are purchased, no contracts made without a free discussion in this meeting. All schools under their control open on the same day, daily programs are conducted on a uniform schedule of time, and all reasonable means are employed to remove the isolation of the rural school, and make every district feel that it is an important part of a great system. Many of the best features of the work in the county at present owe their permanence, if not their origin, to this organization.

A number of the townships have combined in their regular institutes. The result has been increased interest, wholesome emulation and an inspiration to do the best work. Popular institutes should be encouraged, where subjects of interest to patrons and pupils instead of the prescribed work are discussed. The township commencement has its influence in bringing together the home and the school. That the number of gradua-

ates from the eighth grade has increased within the last four years from eleven to 119 and is a gratifying indication. Yet to keep these pupils in the high school and to surround the completion of the high school work with the same atmosphere of anticipation and interest—in short, to prolong the school life of the children unbroken from two to four years—is a problem that should receive its share of earnest attention.

GEORGE H. TAPY, County Superintendent.

V. Compulsory Education

(1) The Law (as amended 1901).
(2) Statistics Concerning, 1901-1902.
(3) The Operation of the Law.
(4) The Effects of Its Enforcement Upon Attendance.
(5) Individual Expressions.
(6) Education and Crime.
(7) Illiteracy.
(8) Child Labor.

1. Compulsory Education Law.

SEC.
1. All children must attend school—Age.
2. County Truant Officers—Duties—Misdemeanor.
3. Truant Officers in cities and towns.
4. Compensation of Truant Officers.
5. Reports.
6. Poor children—Assistance.
7. Parental home—Incorrigible Child.
8. Confirmed truant.
9. Tax.
10. Enumeration.
11. Names of children furnished Truant Officers.
12. Laws repealed.

[1901, p. 470. Approved and in force as amended March 11, 1901.]

ALL CHILDREN MUST ATTEND SCHOOL—AGE.

1. Every parent, guardian, or other person in the State of Indiana, having control or charge of any child or children between the ages of seven (7) and fourteen (14) years, inclusive, shall be required to send such child or children to a public, private or parochial school or to two or all [more] of these schools, each school year, for a term or period not less than that of the public schools of the school corporation where the child or children reside: Provided, further, That no child in good mental and physical condition shall for any cause, any rule or law to the contrary, be precluded from attending schools when such school is in session.

COUNTY TRUANT OFFICERS—DUTIES—MISDEMEANOR.

2. The County Board of Education of each county shall constitute a Board of Truancy whose duty it shall be to appoint on the first Monday in May of each year one Truant Officer in each county. The Truant Officer shall see that the provisions of this act are complied with, and when from personal knowledge or by report or complaint from any resident or teacher of the township under his supervision, he believes that any child subject to the provisions of this act is habitually tardy or absent from school, he shall immedi-

ately give written notice to the parent, guardian, or custodian of such child that the attendance of such child at school is required, and if within five (5) days such parent, guardian or custodian of said child does not comply with the provisions of this section, then such Truant Officer shall make complaint against such parent, guardian or custodian of such child in any court of record for violation of the provisions of this act: Provided, That only one notice shall be required for any child in any one year. Any such parent, guardian or custodian of child who shall violate the provisions of this act shall be adjudged guilty of a misdemeanor and upon conviction thereof shall be fined in any sum not less than five ($5.00) nor more than twenty-five dollars ($25.00), to which may be added, in the discretion of the court, imprisonment in the county jail not less than two nor more than ninety days.

TRUANT OFFICERS IN CITIES AND TOWNS.

3. A city having a school enumeration of five thousand or more children, or two or more cities and towns in any county having a combined school enumeration of five thousand or more, may, in the discretion of the County Board of Truancy, constitute a separate district for the administration of this act. Cities containing a school enumeration of ten thousand children or less shall have but one Truant Officer. Cities containing a school enumeration of more than ten thousand and less than twenty thousand children shall have two Truant Officers. Cities containing a school enumeration of twenty thousand and less than thirty thousand children shall have three Truant Officers. Cities containing a school enumeration of thirty thousand and less than forty thousand children may have four Truant Officers. Cities containing a school enumeration of more than forty thousand children may have five Truant Officers to be selected by the Board of School Commissioners. The Truant Officers of cities and such separate districts shall enforce the provisions of this act in the manner and under such penalties as are prescribed by Section 2 of this act. Truant Officers of cities mentioned in this section shall be appointed by the Board of School Trustees or Board of School Commissioners, respectively, of the city.

COMPENSATION OF TRUANT OFFICERS.

4. The Truant Officers provided for in this act shall receive from the county treasury two [dollars] ($2) for each day of actual service, to be paid by the County Treasurer upon warrant signed by the County Auditor: Provided, That no County Auditor shall issue a warrant upon the county treasury for such service until the Truant Officer shall have filed an itemized statement of time employed in such service; and such statement shall have been certified to by the Superintendent or Superintendents of Schools of the corporation or corporations in which such Truant Officer is employed and such claim have been allowed by the Board of County Commissioners: Provided, further, That no Truant Officer shall receive pay for more days than the average length of school term, in the county, cities or towns under his supervision.

REPORTS.

5. All school officers and teachers are hereby required to make and furnish all reports that may be required by the Superintendent of Public Instruction, by the Board of State Truancy or the Truant Officer, with reference to the workings of this act.

POOR CHILDREN—ASSISTANCE.

6. If any parent, guardian or custodian of any child or children is too poor to furnish such child or children with the necessary books and clothing with which to attend school, then the School Trustee of the township, or the Board of School Trustees or Commissioners of the city or incorporated town where such parent, guardian or custodian resides shall furnish temporary aid for such purpose, to such child or children, which aid shall be allowed and paid upon the certificate of such officers by the Board of County Commissioners of said county. Such Township Trustee, or Board of School Trustees, or Commissioners shall at once make out and file with the Auditor of the county a full list of the children so aided, and the Board of County Commissioners at their next regular meeting, shall investigate such cases and make such provision

for such child or children as will enable them to continue in school as intended by this act.

PARENTAL HOME—INCORRIGIBLE CHILD.

7. School Commissioners, Trustees and Boards of Trustees are empowered to maintain, either within or without the corporate limits of their corporations, a separate school for incorrigible and truant children. Any child or children who shall be truant or incorrigible may be compelled to attend such separate school for an indeterminate time.

CONFIRMED TRUANT.

8. Any child who absents itself from school habitually may be adjudged a confirmed truant by the Truant Officer and Superintendent of the Schools of the county or city. Such confirmed truant may be sentenced by the Judge of the Circuit Court to the Reform School for Boys, if a boy, or the Industrial School for Girls, if a girl, provided its age is within the limits set for admission to such institution. If deemed advisable by said Judge, such incorrigible child or children may be sent to such other custodial institution within the State as may be designated by him. For its maintenance in such custodial institution, the school corporation in which it resides shall pay at the legal rate for supporting dependent children, twenty-five cents (25c) per day, with such expenses of transportation as are necessary.

TAX.

9. For the defraying of the increased expenditure necessary for the carrying out of the purposes of this act Trustees of school townships, Boards of School Trustees or Commissioners of cities and towns and Boards of School Commissioners are hereby empowered to levy in addition to any and all sums heretofore provided by law, any amount of special school revenue not exceeding ten (10) cents on the hundred (100) dollars of taxable property, such taxes to be levied and collected as all other special school revenue.

ENUMERATION OF CHILDREN.

10. In order that the provisions of this act may be more definitely enforced it is hereby provided that the enumerators of school children in taking the annual school census shall ascertain and record the place and date of birth of every child enumerated, and the parent, guardian or custodian of such child shall subscribe and take oath or affirmation that such record is true. The enumerator is hereby empowered to administer such oath or arffimation, and any parent, guardian or custodian of any child who shall refuse to take such oath or affirmation shall be adjudged guilty of a misdemeanor and upon conviction thereof shall be fined any sum not less than one dollar ($1.00).

NAMES OF CHILDREN FURNISHED TRUANT OFFICER.

11. On the first day of school the Trustees, Boards of Trustees, or Commissioners of school corporations, shall furnish the Truant Officer with the names of the children of compulsory age who are enumerated on the regular enumeration lists. These names shall be alphabetically arranged and shall give all the information contained in the regular enumeration returns. The County Commissioners shall provide necessary postage and such blanks as may be required by the State Board of Truancy or the State Superintendent of Public Instruction.

LAWS REPEALED.

12. All laws and parts of laws in conflict with the provisions of this act are hereby repealed.

2. Compulsory Education—Statistics.

SUMMARY FOR THE YEAR ENDING JULY, 1898.

(Close of First Year of Compulsory Education.)

Number of pupils brought into school through the law's enforcement	21,447
Number of these attending private schools	1,339
Number of these attending public schools	20,108
Number who remained in school longer than twelve weeks, the maximum term required under the first law	7,634
Number of children who received assistance	7,634
Total cost of assistance	$15,806 43
Allowance made to truancy officers (per diem)	35,544 61
Total number of officers	230

SUMMARY FOR THE YEAR ENDING JULY, 1899.

(Close of Second Year of Compulsory Education.)

Number of pupils brought into school through enforcement	19,160
Number of these attending private and parochial schools	1,040
Number of these attending public schools	18,033
Number of truants who stayed in school longer than the minimum term (12 weeks)	13,703
Number of children who received assistance	7,380
Total cost of assistance	$15,414 54
Allowance made to truancy officers (per diem)	28,028 00
Total number of officers	194
Number of visits made by officers	52,941
Number of prosecutions	113
Number of prosecutions successful	98

SUMMARY FOR THE YEAR ENDING JULY, 1900.

(Close of Third Year of Compulsory Education.)

Number of truant officers in State	106
Number of days spent in service	13,957⅝
Total amount salaries paid	$27,781 37
Number visits made	67,213
Number pupils brought into school	28,974
Number attending public schools	27,617
Number attending private or parochial schools	1,357
Number who received aid	9,620
Number aided attending public schools	9,509
Number aided attending private or parochial schools	111
Total cost of assistance given	$20,562 94

Number prosecutions	272
Number prosecutions successful	156
Number prosecutions not successful	116
Salaries	$27,781 37
Assistance	20,562 94
Total cost of administering law	$48,344 31

SUMMARY FOR THE YEAR ENDING JULY, 1901.

(Close of Fourth Year of Compulsory Education.)

Number truant officers	108
Total amount salaries paid	$27,885 50
Number days spent in service	14,194¼
Number visits made	65,890
Number of pupils brought into school	25,025
Number attending public schools	23,591
Number attending private or parochial schools	1,434
Number who received aid	8,852
Number aided attending public schools	8,380
Number aided attending private or parochial schools	472
Total cost of assistance given	$19,801 48
Number prosecutions	199
Number prosecutions successful	162
Number prosecutions not successful	37

SUMMARY FOR THE YEAR ENDING JULY, 1902.

(Close of Fifth Year of Compulsory Education.)

Number of truant officers in State	112
Total salaries paid officers	$19,555 75
Number of days officers spent in service	15,722¼
Number of visits made by officers	66,871
Number of pupils brought into school	24,784
Number of these attending public schools	23,921
Number of these attending private schools	863
Number who received aid	10,808
Number aided attending public schools	10,669
Number aided attending private schools	139
Total cost of assistance given	$17,190 05
Number of prosecutions	325
Number of prosecutions successful	242
Number of prosecutions not successful	83
Salaries	$19,555 75
Assistance	17,190 05
Total cost of administering law	$36,745 80
Amount spent per capita of children brought into school	$1 48
Amount spent per capita of children aided to attend	$1 59

TRUANCY LAW—STATISTICS FOR FISCAL YEAR CLOSING JULY 31, 1901.

COUNTIES.	Number of officers.	Salaries paid.	Visits made.	Days in service.	Pupils brought in.	Number attending public schools.	Number attending private or parochial schools.	Number who received aid.	Number aided who attended public schools.	Number aided who attended private or parochial schools.	Total cost of assistance.	Number of prosecutions for violations.	Number successful.	Number not successful.
Adams	1	$252 00	489	126	339	329	10	40	40	. . . .	$90 00	. . .	. . . .	. . . .
Allen	2	854 00	2,316	427	217	217	. . . .	36	36	. . . .	103 80	1	. . . .	1
Bartholomew	1	136 00	215	68	90	90	. . . .	383	383	. . . .	536 69	. . . .	. . . .	. . . .
Benton	1	174 00	324	98	249	227	22	32	32	. . . .	42 00	. . . .	. . . .	. . . .
Blackford	1	244 00	246	122	316	316	. . .	77	77	. . . .	128 99	11	7	4
Boone	1	244 00	393	122	307	302	5	50	50	. . . .	228 09	. . .	. . .	. . . .
Brown	1	40 00	58	20	79	79	. . .	29	29	. . . .	36 68	1	1	. . . .
Carroll	1	300 00	551	150	192	189	3	170	169	1	355 98	. .	. . . .	. . . .
Cass	1	191 00	376	104	159	151	8	41	41	. . . .	250 00	. .	. . .	. . . .
Clark	1	316 00	652	158	478	466	12	39	39	. . . .	82 65	5	5	. . . .
Clay	1	235 50	627	146	228	208	20	3	3	. . . .	3 60	2	2	. . . .
Clinton	1	398 00	340	199	319	319	. . . .	80	80	. . . .	287 68	2	2	. . . .
Crawford	1	216 00	328	108	105	105	. .	8	8	. .	6 40	. . . .	. . . .	. .
Daviess	1	304 00	180	160	190	170	20	130	115	15	102 10	. . .	. . . .	. . . .
Dearborn	1	318 00	454	159	312	312	. . .	131	131	. . . .	245 65	2	2	. . .
Decatur	1	285 00	2,348	1,425	208	204	4	386	386	. . . .	918 00	23	21	2
Dekalb	1	364 00	1,075	182	400	381	19	58	58	. . . .	123 00	8	4	4
Delaware	1	344 00	2,500	172	150	150	. .	30	30	. . . .	192 98	4	4	. . . .
Dubois	1	278 00	821	139	817	770	47	15	15	. . . .	29 00	2	1	1
Elkhart	1	326 00	556	163	111	74	37	234	234	. . . .	533 95	5	5	. . . .
Fayette	1	312 00	852	156	203	177	26	10	10	. . . .	29 97	. . .	. . .	. . .
Floyd	2	624 00	2,699	312	291	283	8	391	391	. . .	749 50	6	5	1
Fountain	1	274 00	527	137	351	351	. .	244	244	. . . .	679 62	. . . .	. . . .	. . . .
Franklin	1	82 00	130	41	149	136	13	4	4	. . . .	3 00	. . . .	. . . .	. . . .
Fulton	1	359 25	332	180	95	95	. . .	48	48	. . . .	170 45	. . .	. . . .	. . . .
Gibson	1	272 00	380	136	140	135	5	84	84	. . . .	287 20	. . .	. . . .	. . . .
Grant	2	614 00	1,789	307	871	871	. . . .	491	491	. . . .	746 78	1	1	. . .
Greene	1	150 00	345	112	500	500	. . . .	75	75	. . . .	100 00	5	2	3

Hamilton	1	266 00	741	133	351	341	10	61	61		117 80	8	8	
Hancock	1	116 00	527	150	151	151						2	1	1
Harrison	1	184 00	306	92	247	247		21	21		46 10			
Hendricks	1	256 00	367	128	117	115	2	53	53		164 67	2	2	
Henry	1	180 00	192	90	29	29		18	18		49 06			
Howard	1	260 00	1,113	130	666	666		202	202		334 03	2		2
Huntington	1	236 00	508	118	24	19	5	74	74		85 95	3	2	1
Jackson	1	264 00	598	140	623	581	42	105	105		261 21	3	3	
Jasper	1	226 00	157	113	115	115		9	9		28 43	2	2	
Jay	1	400 00	1,327	200	472	472		117	117		528 63	7	6	1
Jefferson	1	344 00	1,705	172	479	417	62	291	262	29	413 36	7	7	
Jennings	1	240 00	184	120	61	61		34	34		117 95			
Johnson	1	204 00	470	102	201	201		32	32		42 28	5	4	1
Knox	1	312 00	950	156	1,248	1,200	48	170	165	5	269 60	1	1	
Kosciusko	1	232 00	173	116	660	656	4	114	111	3	339 65	2	2	
Lagrange	1	48 00	75	24	43	43		42	42		65 80			
Lake	2	300 00	662	150	111	94	17	129	118	11	155 82	4	4	
Laporte	1	600 00	140	300	164	160	4	10	6	4	40 00	3	3	
Lawrence	1	352 00	1,281	176	63	63		87	87		358 05	3	3	
Madison	2	634 00	1,021	317	216	216		142	142		235 47			
Marion	6	2,556 00	5,960	1,278	2,269	2,109	160	153	153		305 53	20	15	5
Marshall	1	90 00	200	45	170	150	20	7	7		25 00			
Martin	1	247 00	231	123½	66	66		40	40		50 00			
Miami	1	310 00	350	155	87	87		50	50		100 00	2	1	1
Monroe	1	276 00	560	138	325	325		68	68		178 60	3	3	
Montgomery	1	217 00	153	108½	20	17	3	200	198	2	520 00			
Morgan	1	240 00	600	120	158	158						5	3	2
Newton	1	80 00	156	10	90	90								
Noble	1	130 00	157	65	74	66	8	31	26	5	56 00			
Ohio	1	84 00	116	42	46	46		16	16		44 70			
Orange	1	246 00	274	123	427	427		83	83		163 63	1	1	
Owen	1	179 00	219	89½	69	69		64	64		125 00			
Parke	1	144 00	248	72	394	393	1	47	47		212 25			
Perry	1	226 00	197	113	237	215	22	19	19		34 35	7	6	1
Pike	1	206 75	70	103½	435	435		109	109		245 46	4		4
Porter	1	392 00	1,118	196	123	103	20	46	46		98 75	1		1
Posey	1	300 00	72	150	123	100	23	27	27		85 00	2	2	
Pulaski	1	334 00	351	167	326	322	4	62	62		183 52	1	1	
Putnam	1	210 00	501	105	225	223	2	47	47		130 98	1	1	
Randolph	1	296 00	403	148	413	413		80	80		267 00			

TRUANCY LAW—STATISTICS FOR FISCAL YEAR CLOSING JULY 31, 1901—Continued.

COUNTIES.	Number of officers.	Salaries paid.	Visits made.	Days in service.	Pupils brought in.	Number attending public schools.	Number attending private or parochial schools.	Number who received aid.	Number aided who attended public schools.	Number aided who attended private or parochial schools.	Total cost of assistance.	Number of prosecutions for violations.	Number successful.	Number not successful.
Ripley	1	$210 00	346	105	207	156	51	13	13	. . .	$50 00	5	4	1
Rush	1	100 00	490	75	36	30	6	28	23	5	101 76	5	5	. . . .
Scott	1	20 00	60	10	50	50	. . .	. . .	. . .	. . .	. . . .	. . .	. . .	. . . .
Shelby	1	214 00	759	107	97	71	26	130	130	. . .	752 33	. . .	. . .	. . . .
Spencer	1	58 00	73	29	38	35	3	4	. . .	4	4 35	. . .	. . .	. . . .
Starke	1	266 00	501	133	81	16	65	55	55	. . .	250 00	. . .	. . .	. . . .
Steuben	1	206 00	232	103	81	81	. . .	90	90	. . .	50 00	2	2	. . . .
St. Joseph	2	519 00	2,572	259½	781	296	485	71	66	5	163 08	13	13	. . . .
Sullivan	1	262 00	382	131	198	198	. . .	180	180	. . .	513 68	1	1	. . . .
Switzerland	1	240 00	1,310	120	112	111	1	150	150	. . .	350 00	. . .	. . .	. . . .
Tippecanoe	2	574 00	1,803	287	398	367	31	158	158	. . .	371 54	. . .	. . .	. . . .
Tipton	1	305 00	1,300	152½	478	478	. . .	190	190	. . .	949 97	. . .	. . .	. . . .
Union	1	30 00	51	15	10	10	. . .	8	8	. .	20 85	. . .	. . .	. . . .
Vanderburgh	3	1,042 00	4,162	621	379	367	12	384	2	382	997 80	1	1	. . . .
Vermillion	1	104 00	150	52	44	43	1	40	40	. .	165 61	. . .	. . .	. . . .
Vigo	3	940 00	2,350	470	607	601	6	261	260	1	297 79	1	1	. . . .
Wabash	1	307 00	697	153½	388	388	. . . .	55	55	. . . .	181 77	. . .	. . .	. . . .
Warren	1	312 00	237	156	48	48	. . .	108	108	. . . .	182 47	. . .	. . .	. . . .
Warrick	1	250 00	510	125	21	20	1	154	154	. . .	234 52	. . .	. . .	. . . .
Washington	1	40 00	50	53	150	150	. . . .	100	100	. . . .	76 00	. . .	. . .	. . . .
Wayne	1	265 00	476	132½	101	74	27	418	418	. . . .	339 54	. . .	. . .	. . . .
Wells	1	224 00	402	112	303	303	. . . .	. . .	. . .	. . . .	. . .	3	3	. . . .
White	1	303 00	611	151½	264	264	. . . .	26	26	. . . .	35 03	. . .	. . .	. . . .
Whitley	1	170 00	30	85	169	166	3	50	50	. . .	182 00	. . .	. . .	. . . .
Total	107	$27,885 50	65,890	14,194¼	25,025	23 591	1,434	8,852	8,380	472	$19,801 48	199	162	37

TRUANCY LAW—STATISTICS FOR FISCAL YEAR CLOSING JULY 31, 1902.

COUNTIES.	Number of officers.	Salaries paid.	Visits made.	Days in service.	Number pupils brought in.	Number attending public schools.	Number attending private or parochial schools.	Number who received aid.	Number aided attending public schools.	Number aided attending private or parochial schools.	Total cost of assistance.	Number prosecuted for violation.	Number successful.	Number not successful.	Cases pending.
Adams	1	$162 00	229	81	242	241	1	17	17	. . .	$106 01	5	1	1	3
Allen	2	830 00	2,130	415	374	352	22	25	23	2	51 45	. . .	. . .	. . .	. . .
Bartholomew	1	234 00	290	117	100	100	. . .	262	262	. . .	460 49	. . .	. . .	. . .	. . .
Benton	1	262 00	453	131	231	227	4	29	28	1	87 00	2	2	. . .	. . .
Blackford	1	180 00	346	90	276	276	. . .	36	36	. . .	145 21	2	2	. . .	. . .
Boone	1	316 00	991	162	230	230	. . .	124	124	. . .	320 14	4	4	. . .	. . .
Brown	1	60 00	41	30	43	43	. . .	32	32	. . .	14 20	2	. . .	2	. . .
Carroll	1	294 00	101	147	130	130	. . .	96	94	2	162 73	1	1	. . .	. . .
Cass	1	100 00	184	86½	63	63	. .	29	29	. . .	73 46	1	. . .	1	. . .
Clark	1	396 00	925	198	443	428	15	54	54	. . .	122 65	12	12	. . .	. . .
Clay	1	300 00	50	150	530	530	. . .	15	15	. . .	59 80	13	7	6	. . .
Clinton	1	428 00	560	214	175	174	1	128	128	. . .	347 82	. . .	. . .	. . .	. . .
Crawford	1	152 00	184	77	161	160	1	20	20	. . .	40 06	1	. . .	1	. . .
Daviess	1	298 00	179	149	175	125	50	110	82	28	285 40	7	7	. . .	. . .
Dearborn	1	360 00	661	180	311	307	4	145	145	. . .	465 86	3	3	. . .	. . .
Decatur	1	278 00	672	139	395	395	. . .	677	677	. . .	1,362 95	1	1	. . .	. . .
Dekalb	1	378 00	919	189	241	230	11	70	70	. . .	159 17	4	2	2	. . .
Delaware	1	450 00	1,600	193	550	533	17	80	80	. . .	276 95	2	2	. . .	. . .
Dubois	1	248 00	463	124	182	176	6	39	39	. . .	86 43	. . .	. . .	. . .	. . .
Elkhart	2	536 00	1,233	268	245	229	16	147	147	. . .	282 39	3	2	1	. . .
Fayette	1	312 00	194	166	123	117	6	27	27	. . .	59 82	1	1	. . .	. . .
Floyd	2	684 00	3,084	342	544	537	7	362	362	. . .	402 34	2	. . .	1	1
Fountain	1	292 00	109	146	273	273	. . .	182	182	. . .	608 72	. . .	. . .	. . .	. . .
Franklin	1	86 00	130	43	164	162	2	8	8	. . .	28 35	2	2	. . .	. . .
Fulton	1	278 00	212	139	148	148	. . .	84	84	. . .	159 23	1	1	. . .	. . .
Gibson	1	312 00	603	180	374	368	6	265	263	2	722 86	7	6	1	. . .
Grant	2	668 00	1,116	334	217	216	1	443	443	. . .	748 43	12	8	4	. . .
Greene	1	250 00	164	145	150	148	2	113	113	. . .	310 76	10	3	7	. . .

TRUANCY LAW—STATISTICS FOR FISCAL YEAR CLOSING JULY 31, 1902—Continued.

COUNTIES.	Number of officers.	Salaries paid.	Visits made.	Days in service.	Number pupils brought in.	Number attending public schools.	Number attending private or parochial schools.	Number who received aid.	Number aided attending public schools.	Number aided attending private or parochial schools.	Total cost of assistance.	Number prosecuted for violation.	Number successful.	Number not successful.	Cases pending.
Hamilton	1	$290 00	796	145	297	297	. . .	56	56	. . .	$224 33	8	8	. . . .	. . . .
Hancock	1	315 50	717	157 2/3	183	182	1	191	190	1	388 79	7	5	2	. . . .
Harrison	1	228 00	117	114	8	8	. . . .	46	46	. . . .	79 12	1	. . . .	1	. . . .
Hendricks	1	272 00	560	136	377	377	. . . .	121	121	. . . .	276 17	1	1	. . . .	. . . .
Henry	1	234 00	450	117	392	385	7	12	12	. . . .	38 00	5	5	. . . .	. . . .
Howard	1	248 00	1,466	124	554	554	. . .	252	252	. . . .	369 16	1	1	. . . .	. . . .
Huntington	1	298 00	855	149	27	25	2	17	17	. . .	50 18	3	3	. . . .	. . . .
Jackson	1	254 00	327	135	580	577	3	175	175	. . .	377 55	32	27	5	. . . .
Jasper	1	158 00	102	79	97	97	. . .	10	10	. . . .	28 40	2	2	. . . .	. . . .
Jay	1	438 00	673	219	182	177	5	152	152	. . .	276 31	2	2	. . . .	. . . .
Jefferson	1	330 00	1,907	165	418	391	27	229	218	11	192 31	6	6	. . . .	. . . .
Jennings	1	134 00	135	67	51	51	. . . .	41	41	. . . .	126 00	. . .	. . . .	. . . .	. . . .
Johnson	1	119 00	204	58	135	135	. . .	40	40	. . .	20 00	6	. . .	6	. . . .
Knox	1	298 00	1,204	149	893	809	84	299	292	7	562 26	5	4	1	. . . .
Kosciusko	1	310 00	329	155	500	500	. . . .	129	129	. . .	195 52	5	2	3	. . . .
Lagrange	1	120 00	150	60	181	181	. . . .	59	59	. . .	186 78	8	8	. . . .	. . . .
Lake	2	750 00	789	363	114	108	6	114	112	2	155 95	3	3	. . . .	. . . .
Laporte	2	781 25	2,014	392 1/2	743	641	102	51	51	. . . .	81 21	4	4	. . . .	. . . .
Lawrence	1	224 00	738	112	50	50	. . .	192	192	. . . .	411 73	1	1	. . . .	. . . .
Madison	2	662 00	2,739	337	350	344	6	288	285	3	668 01	1	1	. . . .	. . . .
Marion	6	2,494 00	4,611	1,247	2,232	2,178	54	98	98	. . . .	200 25	10	9	1	. . . .
Marshall	1	360 00	685	148 1/2	267	262	5	130	130	. . .	239 33	5	4	1	. . . .
Martin	1	166 00	202	83	131	131	. . .	31	31	. . . .	59 15	. . .	. . . .	. . . .	. . . .
Miami	1	300 00	611	150	22	20	2	90	90	. . . .	167 80	6	6	. . . .	. . . .
Monroe	1	240 00	250	120	285	285	. . . .	57	57	. . . .	106 85	2	1	1	. . . .
Montgomery	1	286 00	584	143	83	81	2	238	238	. . . .	398 29	3	2	1	. . . .
Morgan	1	320 00	1,150	160	500	500	. . . .	403	403	. . . .	444 24	1	. . . .	1	. . . .
Newton	1	100 00	80	50	50	50	. . . .	26	26	. . . .	49 40	1	1	. . . .	. . . .

Noble	1	220 00	210	110	153	149	4	30	30	....	215 92	3	3	....	....
Ohio	1	215 00	197	111	141	141	....	8	8	....	12 50	....	....	....	....
Orange	1	246 00	328	123	489	489	....	106	106	....	317 85	2	1	1	....
Owen	1	167 00	114	83½	120	120	....	42	42	....	94 40	1	1	....	....
Parke	1	160 00	146	80	180	180	....	37	37	....	260 88	6	1	5	....
Perry	1	250 00	785	125	635	557	78	100	100	....	100 00	1	1	....	....
Pike	1	240 00	198	120	368	368	....	162	162	....	784 42	....	....	....	....
Porter	1	318 00	813	159	104	89	15	37	37	....	79 95	....	....	....	....
Posey	1	356 00	126	178	78	66	12	21	21	....	78 00	....	....	....	....
Pulaski	1	274 00	221	137	213	210	3	30	30	....	133 67	....	....	....	....
Putnam	1	241 00	357	120⅓	224	224	....	75	75	....	156 50	....	....	....	....
Randolph	1	310 00	474	158	192	192	....	116	116	....	308 98	2	1	1	....
Ripley	1	240 00	441	125	31	27	4	24	23	1	106 35	1	1	....	....
Rush	1	240 00	509	104	45	41	4	25	20	5	60 00	8	7	1	....
Scott	1	122 00	263	61	163	163	....	9	9	....	23 40	....	....	....	....
Shelby	1	300 00	300	150	60	52	8	80	65	15	224 29	2	2	....	....
Spencer	1	192 00	158	96	147	147	....	66	66	....	99 42	1	1	....	....
Starke	1	280 00	581	140	72	52	20	5	5	....	8 00	....	....	....	....
Steuben	1	222 00	151	111	12	12	....	50	50	....	102 00	....	....	....	....
St. Joseph	3	971 00	4,539	485½	707	559	148	50	42	8	96 90	15	10	5	....
Sullivan	1	252 00	313	134	99	99	....	136	136	....	302 93	4	1	3	....
Switzerland	1	280 00	480	140	110	110	....	20	20	....	81 55	....	....	....	....
Tippecanoe	2	524 00	1,418	290	260	274	13	273	273	....	459 61	1	1	....	....
Tipton	1	246 00	383	123	251	251	....	49	49	....	133 04	....	....	....	....
Union	1	44 00	89	22	70	70	....	18	18	....	50 20	3	3	....	....
Vanderburgh	4	1,186 00	5,373	593	410	395	15	449	438	11	1,263 04	1	1	....	....
Vermillion	1	102 00	115	51	53	53	....	40	40	....	125 00	1	1	....	....
Vigo	3	1,080 00	2,677	540	1,231	1,181	50	770	730	40	939 48	21	17	4	....
Wabash	1	350 00	560	175	438	438	....	115	115	....	297 95	6	2	4	....
Warren	1	344 00	474	172	16	15	1	76	76	....	329 48	....	....	....	....
Warrick	1	210 00	218	105	37	37	....	118	118	....	289 82	1	1	....	....
Washington	1	164 00	174	82	210	210	....	40	40	....	85 09	....	....	....	....
Wayne	1	344 00	602	172	225	222	3	371	371	....	372 08	1	1	....	....
Wells	1	198 00	187	179	152	152	....	32	32	....	63 40	5	1	4	....
White	1	287 00	434	143½	208	208	....	24	24	....	71 18	5	4	....	1
Whitley	1	270 00	95	135	88	81	7	38	38	....	142 08	7	7	....	....
Total	112	$19,555 75	66,871	15,722½	24,784	23,921	863	10,808	10,669	139	$17,190 05	325	242	78	5

3. The Operation of the Law.

"The first step in juvenile crime is truancy." This is the statement of the superintendent of compulsory education of Chicago. Judge Lindsay, of the Denver juvenile court, says: "Our experience clearly demonstrates that most cases of juvenile delinquency brought into this court begin with truancy."

In view of these facts the operations of the compulsory education law in this State have deep interest. The Board of State Truancy has compiled some statistics from the reports of the 112 truant officers throughout the State showing the operations of the compulsory education law for the school year 1901-1902. At a cost of about $20,000 for the salaries of the officers, an average of 78 cents per child, and $17,000 for books and clothing for the poor, 24,784 children were brought into the schools during the year—23,921 to the public schools and 863 to private or parochial institutions—an average aggregate expense for all the children put in school by the truant officers of $1.48 each. This does not include those who went to school voluntarily because of the requirement of the law. This is the fifth annual report of the Board, the records of the five years having been as follows:

	Children Brought Into School.	*Cost in Salaries and Assistance.*
1898	21,447	$51,351 04
1899	19,160	43,442 54
1900	28,974	48,344 31
1901	25,025	47,686 98
1902	24,784	36,745 80

The reports for 1901-1902 show that the work of the truant officers of Marion County resulted in bringing 2,232 children into the schools, the largest number of any county in the State. Vigo County comes next with 1,231, Knox County shows 893, St. Joseph 707, Perry 635. Harrison County has the lowest number—8. There are twenty-one other counties in which the number brought into school falls below 100. In twenty-six counties it is between one and two hundred and in eighteen counties between two and three hundred.

It was found necessary to provide books and clothing for 10,808 children during the year, and this was done at a cost of $17,190.05, or $1.59 for each child. Of the children thus aided, 10,669 were pupils of the public schools; the remaining 139 attended private or parochial institutions.

In eighteen counties during the past year, the officers succeeded in bringing the children into school without resorting to the prosecution of their parents. In the remaining seventy-four counties there were 325 prosecutions. A comparison of the reports of the past year with those of former years shows a noticeable increase in the number of prosecutions. In 1899, 113 were reported; in 1900, 272; in 1901, 177; in 1902, 325. Jackson County had the highest number, 32; Vigo comes next with 21. The officers in St. Joseph County report 15, in Clay County 13. Clark and Grant had 12, and Greene and Marion 10.

Effort has been made to get the opinion of those informed as to the operations of the law in every county. With but few exceptions the expressions are favorable. Generally speaking, the law is upheld both by the courts and by public sentiment.

When we recognize that lack of training is one of the causes of dependency and delinquency, the compulsory education law therefore where properly enforced, promises to be a very potent factor in our State in the prevention of pauperism and crime.

Under the present law, habitual truants are sent to the Boys' Reform School at Plainfield. This is not a wise or desirable proceeding. Provision should be made for a parental home, to which habitual truants may be sent, where they will not be under the reform school influence, nor when properly fitted for social adjustment, carry with them through life the reproach that the reform school brings.

A. W. BUTLER, Secretary.

4. The Effects of Its Enforcement Upon School Attendance.

Indiana's Compulsory Education Law has been in successful operation five years, modified each session of the General Assembly to meet the wishes of the public and the recommendations of local school and truant officers.

On the foregoing pages statistical matter has been given to show in a direct way the effects of the law upon the truant school population. Below we give the effects of the enforcement of the law upon school attendance:

	Per Cent. of Enrollment Upon Enumeration.	*Per Cent. of Attendance Upon Enumeration.*	*Per Cent. of Attendance Upon Enrollment.*
1889 to 1897, inclusive (before law)	67.8	48.1	70.2
1898, first year of law	75	58	77.5
1899, second year of law	73	56	76
1900, third year of law	75	57	76
1901, fourth year of law	73.5	55.4	75.5
1902, fifth year of law	74.8	55.5	75.5

The showing in per cents. for the first full year of the law's enforcement is the most satisfactory, this being due to its newness and a consequent lack of sufficient knowledge of its weaknesses to enable truants to take advantage of them.

DEDUCTIONS.

1. (a) Per cent. of enrollment upon enumeration during the five years of the operation of the law 74.3
   (b) Per cent. of enrollment upon enumeration during the nine years immediately before the enactment of the law 67.8
   (c) Gain by operation of law 6.5
   (d) The law, therefore, has added an average of 49,094 children to the rolls each year.

2. (a) Per cent of attendance upon enrollment during the five years of the operation of the law..... 76.1
   (b) Per cent. of attendance upon enrollment during the nine years immediately before the enactment of law..... 70.2

   (c) Gain by operation of the law..... 5.9
   (d) The law, therefore, has added an average of 25,120 children to the daily attendance.

The showing made by these figures makes it impossible to dispute the fact that the law has effected a remarkable increase in school attendance. The reports of attendance based upon the enrollment show an addition of twenty-five thousand to the rolls of the school, which number accords with the item, "The number of pupils brought into school," in the summarized reports of the truant officers to the State Board of Truancy.

The larger per cent. of gain in "enrollment based upon the enumeration," compared with the gain in attendance based upon the enrollment, the former being 6.5, the latter 5.9 is due to the character of the pupils added to the schools. The law brought many pupils into the enrollment whose attendance it could not wholly regulate, therefore there was a very large increase in the enrollment, but not a corresponding increase in the attendance.

5. Individual Opinions.

Below are given the opinions of a few of the county superintendents on the operation of the law. The list might be continued indefinitely:

County Superintendent W. V. Payne, Monroe County:

"The average daily attendance has grown from 2,292 to 3,182. The enumeration has grown from 4,449 to 4,525. Thus it is seen that the enumeration has increased 76, while the average daily attendance has increased 890. The increase is due partly to the good work of the compulsory education law and an excellent truant officer."

County Superintendent Jesse Neet, Parke County:

"The compulsory education law is a factor that has influenced the attendance in our schools. The first year after the law was enacted it worked an immediate and gratifying increase in the enrollment and attendance. Since the first year its influence has not been so great nor its workings so satisfactory, yet the attendance is much better than before its enactment and the wisdom of the law is generally acknowledged. We have honestly tried to enforce the spirit and letter of the law, and while it is a source of regret that there are many difficulties connected with its administration, yet, that the law has accomplished and will continue to accomplish much good, there can be no question."

County Superintendent J. H. Grover, Clinton County:

"Under the compulsory education law the attendance in our schools has been greatly improved, especially in the primary grades. But the maximum age limit being so low, it has rather tended to decrease the attendance in the higher grades. This, I think, is owing to the fact that the law, putting the age limit as low as fourteen years, is a suggestion to the pupil and parent that that age relieves them of further moral responsibility as to attending school as well as the legal responsibility. The age limit should be sixteen instead of fourteen years, with a proviso, possibly, that sixty or eighty days be the minimum time a pupil must attend between the ages of fourteen and sixteen."

County Superintendent George D. Marks, Marshall County:

"The attendance is better. I attribute this chiefly to the truant law."

County Superintendent W. H. Senour, Franklin County:

"School attendance has improved in the last few years. The truant law has had much to do with making the attendance more regular."

County Superintendent A. A. Manuel, Brown County:

"The law enacted by the last General Assembly was the first real compulsory education law we have had and we tried to enforce this law, which increased the attendance eight per cent. We succeeded in getting almost three hundred more pupils in the schools of the county than had been in school since my election. Therefore, I heartily endorse the present educational law."

County Superintendent Charles W. Paris, Randolph County:

"Under the operation of the compulsory attendance law the per cent. of attendance based on the enumeration has increased from 63 per cent. in 1898-9 to 65 per cent. in 1901-2, and based on enrollment from 74 to 76 per cent. during same period. This may seem discouraging on first thought, but when we consider that the record of attendance is much more carefully kept than formerly, and hence, that absentees are more surely noted now than they were, we believe the results amply justify the measure."

County Superintendent James H. Clark, Bartholomew County:

"In general the schools of Bartholomew County are in a progressing condition. There is a good educational spirit among the people. Although the enumeration and enrollment have decreased in the last two years, the average attendance has increased, as shown by the following:

	Enumeration.	*Enrollment.*	*Average Attendance.*
1900	7,152	5,462	4,021
1902	6,925	5,277	4,157

While this increase of attendance over enumeration and enrollment is due in part to the truancy law, I believe that the increased interest in education among the people generally has had its full share in keeping children in school."

County Superintendent E. S. Espey, Ohio County:

"The attendance in our schools has grown better each year since we have had the truancy law and we have kept some children in school long enough to acquire sufficient education to be of great value to them, that without the application of the law would probably never have learned even their a b c's. In many cases where we have attempted to put children into the schools, we have found the parents at fault more than the children; and after the children were once enrolled their attendance continued after we ceased to have control of it."

County Superintendent E. E. Robey, Howard County:

"The attendance of the pupils has been considered good. Most of the corporations showed a better school attendance last year than for the year before. The compulsory educational law has been observed fairly well. Only one parental prosecution was made last year. The case was taken before the circuit court. He was let go on suspended sentence, but there was no occasion to have him committed, for the mere arraignment before the court had the desired effect. We expect to have the truant officer to do a little more effective work this year. He will visit each district within the first two months of school and endeavor to keep in closer touch with all of the schools of the country."

County Superintendent A. C. Huff, Spencer County:

"There have never been any prosecutions on account of violations of the truancy law. We have had little trouble in getting the children into the schools when the officer called upon them. The majority of the people now favor the law. Many of them think there is little need of an extra officer to enforce it. They say the teachers and trustees should do that."

County Superintendent E. L. Adair, Noble County:

"Attendance in our schools has been very materially increased by the passage and action of the compulsory education law, by the use of conveyances carrying pupils to school, and as we are constantly developing our high schools, that is also a decided advantage and incentive."

County Superintendent James M. Tilley, Clay County:

"The attendance in this county for the past two years has been good; the truant officer has helped in this to some extent. The average daily attendance for 1900 was 6,297; for 1901, 6,196; for 1902, 6,148. The decrease was due to two things principally—decrease in the school population and to more care in making reports. Only three schools in the county had an average daily attendance of less than twelve last year. On the other hand, the per cent. of attendance, based on the enrollment, was, for 1900, 72 per cent.; for 1901, 73.6 per cent.; for 1902, 75.6 per cent., thus showing a steady gain of about 2 per cent. a year."

County Superintendent Calvin Ochiltree, Fayette County:

"The truant law has to a limited extent improved the attendance in the rural schools. There are only a few families in each township that require the attention of the truant officer. The influence of the law has been good; so, while it has not been necessary to enforce the law very often, the per cent. of attendance has been raised. There were very few, if any, children between the ages of seven and fourteen who were not enrolled in school during the greater part of the past two years."

County Superintendent T. S. Thornburg, White County:

"The interest and attendance in our schools are good, and have shown marked improvements each year, in the very face of the facts that numerous contagious diseases have invaded every school corporation in the county. In 1899 the per cent. of attendance was 90; in 1900, 92; and in 1901, 93½. There are several reasons for these improvements: First, better teachers, better school spirit and accommodations generally and the enforcement of the truancy law."

County Superintendent Richard Park, Sullivan County:

"The compulsory education law has had a very helpful influence."

County Superintendent Homer Dilworth, Steuben County:

"Under the operation of the compulsory law the attendance has been larger and more regular. The sentiment of the general public is with the law."

County Superintendent W. A. Wallace, Daviess County:

"The average daily attendance for Daviess County has gradually increased since the passage of the compulsory law. The average daily attendance for 1900-1901 was 5,236, with an enrollment of 7,370. This year's report shows the attendance to be 5,587, with an enrollment of 7,360—a gain of 351, or over 6½ per cent. on an enrollment of ten less than the previous year. This is surely a substantial gain in school attendance and it speaks well for the truant officer and teachers who have so earnestly worked to have all children who come under the provisions of the compulsory law, in attendance at school. In this connection it might be well to say that in my judgment the compulsory education law is doing a grand work, and it must only be modified or changed in a conservative way, and only then to make its provisions a little stronger. Public opinion has changed wonderfully in regard to this phase of legislation and there is now no question but that a large majority of the people favor the law with its strict enforcement."

6. Education and Crime.

A. W. BUTLER.

A short study has been made of the last five hundred inmates received at the Indiana Reformatory at Jeffersonville, up to and including May 31, 1901. That institution receives those males who are between sixteen and thirty years and have been sentenced to prison. The facts brought out verify those of previous investigations in a striking way.

It is generally recognized that the family relations of over half the inmates of our reformatory institutions have been disturbed. One or both parents are dead or they live apart. The youths have been deprived of home training. The largest proportion are notably deficient in education. Of the 500 studied, sixty-six, or 13.2 per cent. are reported as illiterate; two hundred and fifty-one, or 50.2 per cent., had not reached the fourth grade in the public schools, and but twenty-six, or 5.2 per cent., had reached the high school. Two hundred and eighty-two of all noted were natives of Indiana. The proportion of illiteracy was less in these by almost one-half, and a greater number had passed the elementary school work. On the contrary, a slightly less proportionate number had reached the high school.

The stooping shoulders, awkward arms and shambling gait of these young men indicate plainly a lack of physical training. Four hundred and six, or 81.2 per cent., claim to have no trades. In these busy times, when there is a demand for workmen, two hundred and fifty-two, or 50.4 per cent., state they were unemployed when the crime was committed. Evil associations lead to bad habits. While it is not claimed that those shown are the cause of crime, it is interesting to note their relationship to it. Three hundred and twelve, or 62.4 per cent., use liquor. Three hundred and seventy-four, or 74.8 per cent., smoke cigarettes. Four hundred and nine, or 81.8 per cent., use tobacco in some form.

On the contrary, it is shown that they have not been to any very great extent under those influences which are considered helpful. Many have been deprived of proper home influences. Two hundred and eighty-six, or 57.2 per cent., have not attended Sunday-school. Only one of the five hundred examined claimed to have belonged to the Y. M. C. A.

The offenses of these persons may be classified as crimes against persons and crimes against property. It will be seen that 88 per cent. of them fall under the latter class.

It will be observed that there is something notably lacking in these young men. They lack home training, mental training, physical training, and manual training. The lack of religious training has also been noted.

With the light we have, the great need is for the prevention of crime. Efforts in that direction will be most fruitful. "An ounce of prevention is worth a pound of cure." When the school, the church and the home shall fully understand the facts and the urgent need for renewed effort along every line that may possibly be used to save the boys and girls, the figures will have a different story to tell.

The following are some of the results shown by the investigation. Statistics of last five hundred persons received at Indiana Reformatory up to June 1, 1901:

EDUCATION.

	Number.	*Per Cent.*
Illiterate	66	13.2
Not reached fourth grade	251	50.2
High school only	26	5.2
Of above 500—born in Indiana, 282.		
Illiterate	22	7.8
Not reached fourth grade	123	43.6
High school only	13	4.6

TRADES.

Have no trades	406	81.2
Have trades	94	18.8

EMPLOYMENT.

Not employed when crime committed	252	50.4
Employed	248	49.6

ASSOCIATES.

	Number.	*Per Cent.*
Mixed	419	83.8
Bad	81	16.2
Good	None	

HABITS.

Use of Liquor.

Drink moderately	292	58.4
Drink excessively	20	4
Drink—total	312	62.4
Do not drink	188	37.6

Cigarettes.

Smoke	374	74.8
Do not	126	26.2

Tobacco.

Chew and smoke	313	62.6
Chew only	34	6.8
Smoke only	62	12.4
Use tobacco—total	409	81.8
Do not use tobacco	91	18.2

SUNDAY SCHOOL.

Have attended	214	42.8
Have not attended	286	57.2

YOUNG MEN'S CHRISTIAN ASSOCIATION.

Member	1	.2
Not member	499	99.8

CLASSIFICATION OF CRIME.

Crimes against persons	60	12
Crimes against property	440	88

7. Illiteracy in Indiana.

The inquiry of the National Census Bureau with respect to the literacy of the population does not apply to persons under ten years of age, but "covers a return on the population schedule concerning the ability of each person ten years of age and over to read and write in any language; that is, the test of literacy is based upon one's ability to read and write not necessarily the English language, but the language ordinarily spoken by him." The inquiry into illiteracy naturally developed the fact that there are two classes of illiterates: (1) Persons who can neither read nor write; (2) persons who can read (in a limited way) but can not write. In giving the figures below both classes are represented in the totals and per cents.:

I. Total population of United States, ten years of age and over:
   (a) In 1880 36,761,607
   (b) In 1890 47,413,559
   (c) In 1900 57,949,824

II. Illiterates in United States, ten years of age and over:
   (a) In 1880 6,239,958
   (b) In 1890 6,324,702
   (c) In 1900 6,180,069

III. Per cent. of illiteracy in United States:
   (a) In 1880 ..... 17 per cent.
   (b) In 1890 ..... 13.3 per cent.
   (c) In 1900 ..... 10.7 per cent.

IV. Total population of Indiana, ten years of age and over:
   (a) In 1880 1,468,095
   (b) In 1890 1,674,028
   (c) In 1900 1,968,215

V. Total illiterate population of Indiana, ten years of age and over:
   (a) In 1880 110,761
   (b) In 1890 105,829
   (c) In 1900 90,539

VI. Per cent of illiteracy on total population of Indiana, ten years of age and over:
   (a) In 1880 ..... 7.5 per cent.
   (b) In 1890 ..... 6.3 per cent.
   (c) In 1900 ..... 4.6 per cent.

   (This showing is better than that of any other State lying to the east of us, save Ohio.)

VII. Illiterate male population, ten years of age and over:

1. In the United States—
   (a) In 1880, 2,966,421, 15.8 per cent. of males of age as above.
   (b) In 1890, 3,008,222, 12.4 per cent. of males of age as above.
   (c) In 1900, 3,055,056, 10.2 per cent. of males of age as above.
2. In Indiana—
   (a) In 1880, 52,033, 6.9 per cent. of males of age as above.
   (b) In 1890, 49,505, 5.8 per cent. of males of age as above.
   (c) In 1900, 43,763, 4.3 per cent. of males of age as above.

VIII. Illiterate female population, ten years of age and over:

1. In the United States—
   (a) In 1880, 3,273,537, 18.2 per cent. of females of age as above.
   (b) In 1890, 3,316,480, 14.4 per cent. of females of age as above.
   (c) In 1900, 3,191,801, 11.3 per cent. of females of age as above.
2. In Indiana—
   (a) In 1880, 58,728, 8.2 per cent. of females of age as above.
   (b) In 1890, 56,324, 6.9 per cent. of females of age as above.
   (c) In 1900, 46,776, 4.9 per cent. of females of age as above.

IX. Illiterate native white population, ten years of age and over:

1. In the United States—

	Total Population of Such Age.	*Illiterate Population of Such Age.*	*Per Cent.*
(a) In 1880	25,785,789	2,255,460	8.7
(b) In 1890	33,144,187	2,065,003	6.2
(c) In 1900	41,363,565	1,916,434	4.6
2. In Indiana—			
(a) In 1880	1,297,159	87,786	6.8
(b) In 1890	1,495,302	78,638	5.3
(c) In 1900	1,780,458	63,800	3.6

(This is larger than in the New England and Eastern States.)

X. Illiterate colored population* ten years of age and over:

1. In the United States—

	Total Population of Age as Above.	*Total Illiterate Population Kind and Age as Above.*	*Per Cent.*
(a) In 1880	4,601,207	3,220,878	70.0
(b) In 1890	5,482,485	3,112,128	56.8
(c) In 1900	6,810,934	3,037,252	44.6
2. In Indiana—			
(a) In 1880	29,140	10,363	35.6
(b) In 1890	35,694	11,495	32.2
(c) In 1900	47,355	10,680	22.6

XI. Illiterate negro population, ten years of age and over:
1. In the United States—
(a) In 1900.....Males .....43.0 per cent.
(b) In 1900.....Females .....45.8 per cent.
(c) In 1900.....Both sexes.....44.4 per cent.
2. In Indiana—
(a) In 1900.....Males .....21.7 per cent.
(b) In 1900.....Females .....23.4 per cent.
(c) In 1900.....Both sexes.....22.6 per cent.
*Persons of negro descent, Chinese, Japanese and Indians.

XII. Illiterate native white population of native parentage, ten to fourteen years of age:
1. In the United States—
(a) In 1890 ..... 6.7 per cent.
(b) In 1900 ..... 4.4 per cent.
2. In Indiana—
(a) In 1890 ..... 2.0 per cent.
(b) In 1900 ..... 0.5 per cent.
(Good showing for modern schools.)

XIII. Illiterate foreign white population, ten to fourteen years of age:
1. In the United States—
(a) In 1890 ..... 5.9 per cent.
(b) In 1900 ..... 5.6 per cent.
2. In Indiana—
(a) In 1890 ..... 3.4 per cent.
(b) In 1900 ..... 2.0 per cent.
(Good showing.)

XIV. Illiterate negro population, ten to fourteen years of age:
1. In the United States—
(a) In 1900 ..... 30.1 per cent.
2. In Indiana—
(b) In 1900 ..... 1.5 per cent.

8. Child Labor.

Since the creation of the Department of Factory Inspection in Indiana the labor of children has been carefully reviewed. It is not lawful for a child under fourteen years of age to labor during the school term. Factory superintendents or owners are required to obtain certificates from parents in relation to ages. Inasmuch as this subject lies within the jurisdiction of the factory inspector who makes annual reports to the Governor, it is not necessary to enter into a detailed account of this work.

VI. Reading Circles, Associations, Institutes, Examinations and Licenses.

1. Reading Circles.
   (a) Organization.
   (b) Teachers' Circle.
   (c) Young People's Circle.
   (d) Statistical Tables, 1901 and 1902.
2. Associations and Institutes.
   (Associations):
   (a) State Teachers' Association.
   (b) Southern Teachers' Association.
   (c) Northern Teachers' Association.
   (d) City and Town Superintendents.
   (e) County Superintendents' Association.
   (Institutes):
   (f) County Associations.
   (g) County Institutes—Law—List of—Cost of.
   (h) Township Institutes—Introductory—Cost of—Law.
3. Examinations.
   (a) Life State (Graduates).
   (b) Professional.
   (c) Life State (Non-Graduates).
   (d) Sample Question Lists for all Examinations.
4. Licenses.
   (a) Professional and Life State.
   (b) Sixty Months' License.

1. Indiana Reading Circles.

(a) ORGANIZATION.

The Indiana Teachers' and Young People's Reading Circles are recognized as important factors in furthering the educational interests of the State. The history of the circles is an honorable one and the thousands of teachers and pupils who have received inspiration from the courses of reading prescribed from year to year testify at all times to the great worth of the work.

The circles were organized by the State Teachers' Association, the former in 1883 and the latter in 1887. The Board of Directors is guided in its work by the following constitution:

ORGANIZATION OF THE BOARD OF DIRECTORS.

1. The Indiana State Teachers' Association hereby constitutes the Board of Directors for the Indiana Teachers' and Young People's Reading Circles, and adopts the following rules and regulations for its government.

2. The aforesaid Board of Directors shall be composed of seven members, including the State Superintendent of Public Instruction, who shall be ex-officio a member of the board. Of the remaining six members, at least one shall be a county superintendent; at least one a city superintendent, and the remainder shall be chosen from the teaching profession at large.

3. No member of a publishing firm, or agent of such firm, shall be eligible to membership on this board. Should any member of this board become a member of a publishing firm, or agent of such firm, within the term for which he was appointed to this board, his membership herein shall immediately cease, and the State Teachers' Association shall at its next meeting fill the vacancy thus arising for the unexpired portion of said term.

4. The members of this board, except the State Superintendent, whose membership shall be concurrent with his incumbency of the State Superintendency, shall be appointed by the State Teachers' Association in annual convention for a term of three years, or until their successors are appointed.

5. Should any member of the Board of Directors leave the teaching profession or quit active school work, his membership shall immediately cease. At each annual meeting of the State Teachers' Association, the association shall fill all vacancies for the unexpired portion of such terms.

6. The officers of this board shall be a president, a vice-president and a treasurer, who shall be chosen annually from the membership of the board, and a secretary, who shall not be a member of this board and shall be chosen annually.

On the last day of each annual meeting of the State Teachers' Association, the members of the Reading Circle Board of Directors shall meet and organize for the ensuing year.

7. The members of the board shall receive a per diem of four dollars and actual expenses, for all time employed in discharging the duties devolving upon them as members of said board; but no member shall receive any additional per diem or salary as an officer of the board. The board shall allow and pay the secretary such reasonable salary as will be a fair compensation for the duties performed.

8. It shall be the duty of this board to plan a course of reading, from year to year, to be pursued by the public school teachers of Indiana, to provide for examination on the said course and to prepare questions for the same; to issue certificates to such teachers as pass the examinations satisfactorily, and to issue diplomas to such teachers as pass the examinations in four successive years satisfactorily.

It shall also be the duty of this board to plan a course of reading from year to year, to be pursued by the pupils in the public schools of Indiana, and to make such rules and regulations as to examinations, certificates and diplomas, in the Young People's Reading Circle, as the board may deem desirable and practicable.

It shall be the further duty of this board to select the books to be read in such Teachers' and Young People's courses; to make the most favorable terms with the publishers as to prices of such books to members of the two Reading Circles, and to provide a plan for a convenient and inexpensive distribution of the books to the teachers and pupils.

9. At each annual meeting of the State Teachers' Association, this board shall make a report of the receipts and disbursements for the year just closing and of such other items as in its judgment shall be of interest to the association, or as the association shall from time to time request. At each annual meeting of the association, an auditing committee shall be appointed for the coming year, to audit the books and accounts of the Reading Circle Board. At each meeting of the association, the report of this auditing committee shall be appended to the report of the Board of Directors and shall be a part of the report of that board to the State Teachers' Association.

10. This constitution, rules and regulations may be amended, revised, or annulled by a majority vote at any annual meeting of the Indiana State Teachers' Association.

The constitution sets forth the scope of the work of the Board of Directors, which is wholly voluntary, no phase of it being due to legislative enactment.

(b) THE TEACHERS' CIRCLE.

The Teachers' Circle is in a prosperous condition. The year just closed has been one of the most successful in its history. There has been an annual increase in the membership from the date of its organization, until now nearly every employed teacher is a member. The teachers of the State appreciate the benefits derived from this organization and have used it as a means for better professional training.

For a few years past the directions for the work of the circle have been placed in the Township Institute Outlines. By this plan all the teachers in the State, except those in towns and cities, take part in the discussions of the subject matter of the Reading Circle books. (See Tp. Institute Outline, Section II, of this report.)

The State Board of Education recognizes the importance of the work by offering credits in lieu of the regular examinations for State and county licenses. Nearly 1,500 manuscripts were graded from the examination held July 19, 1902. Passing grades on the two Reading Circle books exempt the teachers from examination in the Science of Education and Literature in examinations for county licenses, at any examination held the year following the date of the Teachers' Reading Circle examination. Passing grades in four successive yearly examinations, two books each year, entitle teachers to Reading Circle diplomas and exempt them from examination in the Science of Education and Literature in examinations for State licenses.

There were 14,450 members in this circle in 1900-01 and 14,022 in 1901-02. This membership was well distributed over the State as will be shown by a comparison with the number of teachers employed in the schools of the counties. (See tables following.) Marion County makes the poorest showing for the reason that the Indianapolis teachers do not take the work.

(c) YOUNG PEOPLE'S CIRCLE.

No limit can be placed on the good the Young People's Reading Circle has done. The books selected represent every department of literature and are suited to all grades.

The reports from county superintendents show that in 1900-01 there were 176,628 members, the children erading 342,621 books. In 1901-2 there were 187,851 members, reading 467,948 books.

In the advancement of the Young People's Reading Circle work the Board has the earnest co-operation of school officials throughout the State, to the end that all children may have access to the best books.

In some counties township trustees have placed in each school every year a complete set of the books where they may be used as a library. In other instances, enterprising teachers have raised funds by entertainments and in other ways and bought the books for their schools. Thousands of children have bought their own books (different plans are suited to different localities), but nearly all the teachers find some way to assist their pupils to come into possession of these books.

The Reading Circle Board prescribes the books to be read, notifies the school authorities where they may be bought, and offers inducements for reading them by giving certificates and diplomas. The work is growing constantly in extent and efficiency. Its promoters desire and deserve the earnest co-operation of the parents, teachers and school officials.

W. A. LOWER,
Secretary Indiana Reading Circles.

(d) INDIANA READING CIRCLE STATISTICAL TABLE, 1900–1901.

Number.	COUNTIES.	Number teachers employed.	Number teachers members.	Number children enrolled in schools.	Number children members.	Number books read.
1	Adams	132	150	5,455	4,000	6,000
2	Allen	353	300	11,955	4,000	5,000
3	Bartholomew	164	164	5,339	1,455	2,000
4	Benton	125	110	3,157	750	2,150
5	Blackford	95	50	4,263	950	2,500
6	Boone	180	158	6,518	490	1,150
7	Brown	75	77	2,759	*	*
8	Carroll	163	150	5,168	779	2,043
9	Cass	198	200	7,030	400	500
10	Clark	184	200	6,679	3,240	3,400
11	Clay	186	160	8,418	6,500	2,500
12	Clinton	193	204	6,996	636	1,432
13	Crawford	89	116	3,856	1,503	2,781
14	Daviess	185	185	7,370	2,150	7,150
15	Dearborn	143	150	4,223	250	420
16	Decatur	140	140	4,302	2,287	12,385
17	Dekalb	161	120	5,706	563	2,810
18	Delaware	275	225	11,072	500	800
19	Dubois	149	175	4,808	2,596	11,395
20	Elkhart	278	302	9,698	8,000	24,500
21	Fayette	82	80	2,488	761	2,434
22	Floyd	124	50	5,503	1,000	3,000
23	Fountain	167	107	5,276	1,900	3,300
24	Franklin	108	124	3,615	2,174	6,180
25	Fulton	132	150	4,529	2,500	5,000
26	Gibson	204	200	7,512	2,364	4,473
27	Grant	271	265	12,298	2,500	3,000
28	Greene	198	200	7,661	4,000	1,300
29	Hamilton	202	201	7,432	5,045	1,025
30	Hancock	145	145	4,790	1,947	3,542
31	Harrison	170	170	5,461	1,530	7,240
32	Hendricks	153	187	4,655	1,075	3,664
33	Henry	169	173	5,285	2,314	3,085
34	Howard	170	200	6,987	1,844	8,303
35	Huntington	192	180	6,645	2,138	14,217
36	Jackson	173	172	6,128	826	1,701
37	Jasper	139	139	4,063	1,054	2,142
38	Jay	173	165	6,765	1,487	2,340
39	Jefferson	159	172	4,774	3,350	5,000
40	Jennings	118	118	3,814	1,892	8,933
41	Johnson	144	102	4,647	800	1,000
42	Knox	196	175	6,932	2,000	3,000
43	Kosciusko	208	208	7,140	1,695	8,355
44	Lagrange	136	138	3,862	1,606	6,011
45	Lake	241	250	7,835	4,807	11,351
46	Laporte	210	160	6,567	1,544	4,955
47	Lawrence	157	165	6,131	400	450
48	Madison	365	250	15,512	1,800	2,300
49	Marion	834	168	33,043	1,722	5,472
50	Marshall	186	160	6,465	2,350	3,400
51	Martin	111	111	3,924	1,200	700
52	Miami	200	225	6,629	1,000	1,080

*No report.

INDIANA READING CIRCLE STATISTICAL TABLE, 1900-1901—Cont'd.

Number.	COUNTIES.	Number teachers employed.	Number teachers members.	Number children enrolled in schools.	Number children members.	Number books read.
53	Monroe	145	150	5,352	5,264	1,212
54	Montgomery	227	223	6,913	*	*
55	Morgan	155	155	4,921	2,348	9,326
56	Newton	105	95	2,730	800	.....
57	Noble	158	152	4,988	583	1,718
58	Ohio	37	36	1,138	1,000	25
59	Orange	112	120	4,133	1,200	5,000
60	Owen	115	123	3,791	456	1,232
61	Parke	170	160	5,494	1,800	3,200
62	Perry	131	140	4,151	1,450	665
63	Pike	129	130	5,294	2,064	2,967
64	Porter	149	149	4,262	542	1,567
65	Posey	148	146	5,046	2,632	7,132
66	Pulaski	126	90	3,810	1,400	800
67	Putnam	171	200	4,911	1,500	3,000
68	Randolph	197	194	6,923	5,000	10,000
69	Ripley	133	135	4,238	1,638	4,495
70	Rush	136	132	4,019	876	2,642
71	Scott	66	63	2,344	490	855
72	Shelby	199	210	5,971	1,500	.....
73	Spencer	178	150	5,514	300	200
74	Starke	85	88	2,770	2,718	2,718
75	St Joseph	283	225	9,116	1,850	2,250
76	Steuben	128	235	3,511	2,121	2,500
77	Sullivan	167	167	6,772	3,049	7,782
78	Switzerland	94	100	2,580	500	140
79	Tippecanoe	259	250	8,240	2,294	8,390
80	Tipton	120	120	4,851	596	1,676
81	Union	59	60	1,395	901	2,100
82	Vanderburgh	323	83	11,349	1,200	4,000
83	Vermillion	118	115	3,935	3,000	3,500
84	Vigo	331	147	12,912	1,450	2,975
85	Wabash	232	200	7,033	7,000	.....
86	Warren	115	112	2,797	1,200	1,000
87	Warrick	158	150	5,707	1,047	3,870
88	Washington	161	167	5,357	2,400	2,400
89	Wayne	218	220	5,910	4,568	2,150
90	Wells	147	124	5,816	1,052	3,463
91	White	162	160	5,098	1,017	1,962
92	Whitley	127	128	4,321	2,148	4,840
	Total	15,979	14,450	556,731	176,628	342,621

* No report.

INDIANA READING CIRCLE STATISTICAL TABLE, 1901-1902.

Number.	COUNTIES.	Number teachers employed.	Number teachers members.	Number children enrolled in schools.	Number children members.	Number books read.
1	Adams	135	200	5,448	5,000	3,000
2	Allen	355	400	12,234	8,000	4,000
3	Bartholomew	166	175	5,277	2,000	2,000
4	Benton	125	110	3,289	1,045	1,625
5	Blackford	97	75	4,434	900	2,000
6	Boone	180	159	6,642	1,119	3,649
7	Brown	76	75	2,661	.....	.....
8	Carroll	160	150	4,894	407	965
9	Cass	198	132	7,173	1,200	2,400
10	Clark	186	200	6,965	3,500	4,550
11	Clay	185	175	8,126	7,000	3,500
12	Clinton	190	190	7,024	812	2,051
13	Crawford	96	107	3,736	2,592	1,348
14	Daviess	185	150	7,360	1,311	4,150
15	Dearborn	146	146	4,374	309	1,794
16	Decatur	144	145	4,141	2,059	11,173
17	Dekalb	158	122	5,851	728	2,641
18	Delaware	285	200	11,041	1,148	2,190
19	Dubois	148	180	4,646	2,485	11,225
20	Elkhart	279	280	9,625	7,522	13,400
21	Fayette	78	60	2,508	689	2,978
22	Floyd	123	131	5,307	3,363	16,453
23	Fountain	166	130	5,226	1,635	645
24	Franklin	106	124	3,101	2,134	6,813
25	Fulton	138	150	4,549	1,850	5,000
26	Gibson	207	200	7,657	3,403	4,000
27	Grant	287	200	13,013	2,032	10,704
28	Greene	199	200	8,308	5,000	6,500
29	Hamilton	207	190	7,510	4,200	6,150
30	Hancock	148	150	4,688	1,693	4,446
31	Harrison	166	175	5,493	3,000	12,000
32	Hendricks	147	164	4,637	1,288	4,646
33	Henry	168	176	5,586	4,078	12,000
34	Howard	173	180	6,933	2,440	9,287
35	Huntington	186	190	6,711	4,472	28,208
36	Jackson	170	141	5,996	1,506	2,896
37	Jasper	140	140	3,047	1,260	3,512
38	Jay	172	160	6,794	1,750	3,500
39	Jefferson	161	176	4,640	2,576	5,000
40	Jennings	115	115	3,559	2,020	8,895
41	Johnson	146	102	4,651	600	1,000
42	Knox	207	160	7,398	2,050	3,250
43	Kosciusko	212	166	6,962	3,760	12,875
44	Lagrange	128	109	3,849	1,487	3,825
45	Lake	249	290	7,641	4,181	20,026
46	Laporte	191	135	6,748	2,687	7,986
47	Lawrence	161	150	6,498	360	400
48	Madison	370	170	15,890	600	3,000
49	Marion	866	185	33,182	500	950
50	Marshall	188	165	6,423	2,008	7,201
51	Martin	100	112	3,763	585	1,742
52	Miami	213	190	6,912	1,500	3,000
53	Monroe	148	110	5,575	400	3,000
54	Montgomery	213	213	6,718	785	1,260
55	Morgan	156	158	5,026	2,184	4,460
56	Newton	102	95	2,688	300	2,500

INDIANA READING CIRCLE STATISTICAL TABLE, 1901-1902—Contin'd.

Number.	COUNTIES.	Number teachers employed.	Number teachers members.	Number children enrolled in schools.	Number children members.	Number books read.
57	Noble	151	130	4,919	1,541	2,378
58	Ohio	37	35	1,086	300	150
59	Orange	114	117	4,278	678	1,000
60	Owen	120	121	3,895	726	463
61	Parke	171	150	5,648	1,598	4,586
62	Perry	129	138	4,400	1,780	5,240
63	Pike	133	131	5,843	1,105	2,501
64	Porter	144	151	4,085	577	2,003
65	Posey	148	148	5,491	3,200	14,520
66	Pulaski	126	100	3,735	1,091	1,634
67	Putnam	176	176	5,044	1,200	2,500
68	Randolph	200	192	6,819	4,707	13,121
69	Ripley	133	135	4,132	2,413	3,000
70	Rush	137	125	4,129	1,772	3,832
71	Scott	63	66	2,136	673	2,115
72	Shelby	201	210	6,161	2,189	1,412
73	Spencer	175	175	5,739	1,463	2,000
74	Starke	83	86	2,956	1,963	3,475
75	St. Joseph	284	150	9,611	1,500	1,200
76	Steuben	118	125	3,405	2,005	2,223
77	Sullivan	169	170	6,940	3,922	9,904
78	Switzerland	96	92	2,604	460	140
79	Tippecanoe	259	240	8,262	1,886	8,943
80	Tipton	119	115	4,780	716	1,968
81	Union	58	60	1,339	950	1,800
82	Vanderburgh	326	86	11,242	3,107	7,528
83	Vermillion	106	115	3,995	1,000	1,500
84	Vigo	346	152	13,619	1,150	2,300
85	Wabash	232	200	7,047	7,000	25,000
86	Warren	114	115	2,831	1,230	1,230
87	Warrick	158	150	5,618	1,150	4,320
88	Washington	160	167	5,313	835	1,900
89	Wayne	220	221	6,868	2,150	10,820
90	Wells	149	125	5,805	751	2,617
91	White	162	189	4,990	3,021	5,827
92	Whitley	129	131	4,331	2,529	3,490
	Total	16,039	14,022	560,224	187,851	467,948

2. Associations and Institutes.

(a) STATE TEACHERS' ASSOCIATION.

BY JAMES R. HART, SECRETARY.

Indiana has always taken a front rank in educational affairs, and not infrequently have some of her institutions of learning served as models for other and more pretentious institutions throughout the country.

The schools of Indiana are so graded that the educational career of the child may begin in the district school and end in the University. There is a sort of organic unity running throughout the whole school system, which makes it worthy to be called a splendid school system. This system has been marked by a constant development toward high ideals in both the art and science of education.

No other factor has been so potent in this educational development in Indiana as the State Teachers' Association.

This Association was founded nearly fifty years ago by pioneer teachers, most of whom have gone to their reward, but not until they left the impress of their lives upon their noble work. Thomas Jefferson said, "Every institution is the shadow of a great man." This institution is the shadow of great men, and great women, who were devoted to the cause of education and humanity. They were profound scholars, zealous instructors, and ardent lovers of their work. They did not know as much about the doctrines of Hegel and Herbart as the membership of the present body, but they were an inspiration to those who were fortunate enough to sit at their feet or even to touch the hem of their garments.

They are not all gone from the scene of their labors. Some of them still take an active part in all the deliberations of this great body of Indiana teachers, and add very materially to its ever increasing usefulness.

The first annual session of the Indiana State Teachers' Association was held in Indianapolis, December 25, 1854. The first meeting was held in accordance with resolutions passed by teachers' associations held in Shelbyville and Salem in the year 18 . These associations issued a circular for the purpose of calling a convention of practical teachers with the view of organizing a permanent State Teachers' Association, and this circular was signed by the following persons:

Caleb Mills, M. M. C. Hobbs, E. P. Cole, Rufus Patch, B. L. Lang, T. Naylor, O. J. Wilson, J. Bright, Geo. W. Hoss, Cyrus Nutt, Charles Barnes, James G. May, John Cooper, B. T. Hoyt, Lewis A. Estes, J. S. Ferris, R. B. Abbott, George A. Chase, Silas Baily.

The first session was held in the State Capitol, at half-past six o'clock p. m., on Monday, December 25, 1854. Rev. William M. Dailey, D. D., President of the State University, was called to the chair, and briefly stated the object of the meeting. The session was opened with prayer by Rev. T. H. Sinex, of Bloomington, after which Prof. D. Read, of the State University, delivered an address upon the "Importance of Civil Polity as a Branch of the Common School Education." After the address, upon motion, the convention proceeded to organize the State Teachers' Association.

A motion was made to appoint a committee to draft a constitution. Prof. Mills arose and stated to the convention that, at the request of a committee of teachers, he had prepared a constitution, which was in the hands of the secretary, George A. Chase, of Rushville. The motion was withdrawn, and, at the request of the convention, the secretary read the following constitution:

PREAMBLE.

As harmony and concert of action are highly necessary for the thorough and entire accomplishment of any important purpose, and believing that it is especially so in the department of education, we, the undersigned, as a means of elevating the profession of teaching, and of promoting the interests of the schools of Indiana, associate ourselves together under the following

CONSTITUTION.

Article I. This organization shall be styled the Indiana State Teachers' Association.

Art. 11. The officers of this Association shall be a president, seven vice-presidents, a recording secretary, a corresponding secretary, a treas-

urer, and an executive committee of seven, the whole to be elected by ballot, and to serve for a period of one year, and until their successors are chosen.

Art. III. It shall be the duty of the president to preside at all meetings of the association, and perform all functions usually belonging to such office. In his absence or inability to preside, one of the vice-presidents shall take his place.

Art. IV. The recording secretary shall keep a fair and full record of proceedings of the association.

Art. V. It shall be the duty of the corresponding secretary to manage all the correspondence of the association, under the executive committee. He shall copy in a book, to be provided for the purpose, all communications emanating from him, and shall carefully file those received by him, so as to be easy of access. He shall report the correspondence, whenever called upon, at any regular meeting of the association.

Art. VI. The treasurer shall receive and keep all funds belonging to the association, and pay out the same only on order of the association or the executive committee. He shall keep carefully a file of all vouchers for the distribution of the moneys of the association, and shall report the condition of the finances when called upon to do so at any regular meeting.

Art. VII. The executive committee shall carry into effect all orders and resolutions of the association, and shall devise and put into operation all measures, not inconsistent with its design, as said committee shall deem best. It shall secure speakers, and arrange business to come before the association. It shall keep a full record of its proceedings, and present an annual report of the same to the association. It shall hold its first meeting as soon after election as possible. Four members shall constitute a quorum, and may meet from time to time on their own adjournment.

Art. VIII. Any teacher or other active friend of education may become a member of the association by signing the constitution, and, if males, by paying the treasurer one dollar; if females, by paying fifty cents.

Art. IX. The meetings of the association shall be held annually, on the adjournment of the association, in the latter part of December.

Art. X. This constitution may be amended by a majority of the members present at any regular meeting of the association.

The constitution was revised in 1886, and now read as follows:

PREAMBLE.

As harmony and concert of action are highly necessary for the thorough and entire accomplishment of any important purpose; and believing that it is especially so in the department of education, we, the undersigned, as a means of elevating the profession of teaching, and of promoting the interests of the schools of Indiana, associate ourselves together under the following

CONSTITUTION.

Article I. This organization shall be styled the Indiana State Teachers' Association.

Art. II. The officers of this association shall be a president, seven vice-presidents, a recording secretary, a permanent secretary and treasurer, and an executive committee of seven, the whole to be elected by ballot and, with the exception of the peramenent secretary, to serve for a period of one year and until their successors are chosen.

Art. III. It shall be the duty of the president to preside at all meetings of the association, and perform all functions usually belonging to such office. In his absence or inability to preside, one of the vice-presidents shall take his place.

Art. IV. The recording secretary shall keep a fair and full record of all proceedings of the association.

Art. V. The permanent secretary shall serve during life, unless sooner removed. He shall take charge of the permanent records, and shall collect, record and keep all important statistics in regard to the history of the association.

Art. VI. The permanent secretary and treasurer shall be ex-officio, and as such shall receive and keep all funds belonging to the association, and pay out the same only on order of the association or the executive committee. He shall keep in a book a faithful and intelligent account of all moneys received and expended by him. He shall keep carefully a file of all vouchers for the distribution of the money of the association, and shall report the condition of the finances when called upon to do so at any regular meeting. He shall receive for his services such reasonable compensation as the executive committee may annually direct.

Art. VII. The executive committee shall carry into effect all orders and resolutions of the association, and shall devise and put into operation all measures, not inconsistent with its design, as said committee shall deem best. It shall secure speakers, and arrange business to come before the association. It shall keep a full record of its proceedings, and present an annual report of the same to the association. It shall hold its first meeting as soon after election as possible. Four members shall constitute a quorum, and may meet from time to time on their own adjournment.

Art. VIII. Any teacher or other active friend of education may become a member of the association by signing its constitution, and, if males, by paying the treasurer one dollar; if females, by paying fifty cents.

Art. IX. The meetings of the association shall be held annually, on the adjournment of the association, in the latter part of December.

Art. X. This constitution may be amended by a majority of the members present at any regular meeting of the association.

The officers elected at the first session for the ensuing meeting were as follows:

President—Rev. William M. Dailey, D. D., Bloomington.

Vice-Presidents—Rev. Cyrus Nutt, Centerville; Rev. J. S. Ferris, New Castle; Rev. Chas. Adams, Indianapolis; Prof. D. Read, Bloomington; Prof. J. M. Stone, Hanover College; Prof. S. H. Thomson, Hanover College; Prof. R. Patch, Ontario.

Recording Secretary—George A. Chase, Rushville.

Corresponding Secretary—E. P. Cole, Indianapolis.

Treasurer—E. P. Cole, Indianapolis.

Executive Committee—Prof. Geo. W. Hoss, Chairman; Rev. Dr. Curry, Greencastle; Jas. G. May, New Albany; E. P. Cole, Indianapolis; Charles Barnes, Madison; R. B. Abbott, New Castle; Rev. Bishop Ames, Indianapolis.

Most of the work of the Association is planned by committees which are appointed at each annual session.

The Executive Committee has charge of the business affairs of the Association, such as making programs, securing men of national reputation to address the meetings each year, arranging for places of meetings, and other matters connected with the welfare of the members.

The Committee on Officers consists of thirteen members, one from each congressional district, who serve during the meeting of the Association, and elect officers for the ensuing year, and make their report just before the close of the meeting at which they were appointed.

The Auditing Committee is appointed by the President, and have for their duty the examination of the receipts and vouchers of the Treasurer, and it is also their duty to make a report of the same to the Association.

The Committee on Resolutions usually embody in their report the needs of the Association in matters of legislation, and the appointment of special committees to examine and report on such questions as seem pertinent to the best interests of the Association.

The Committee on Legislation carry out as nearly as may be the recommendations of the Committee on Resolutions, and meet with the educational committees of the State Legislature, and often formulate bills and present the same to committees of the Legislature for their consideration.

About fourteen years ago it was thought that the topics discussed in the Association were of such general character that there was a necessity for devoting some of the time to special phases of the work in the various departments of the public schools. In accord-

ance with this idea, sections of the Association were formed, from time to time, until now there are eleven sections, as follows:

High School.	Primary.	Child Study.
English.	County Superintendents.	Music.
Classical.	Library.	Reading and Elocution.
Mathematical.	History.	

The following is a list of the officers of the Association since its organization:

Date Elected.	President.	Secretary.	Treasurer.	Chairman Executive Committee.
1854	Wm. M. Dailey	Geo. A. Chase	B. L. Lang	George W. Hoss.
1855	Chas. Barnes	Geo. A. Chase	John D. Dillon	S. T. Bowen.
1856	James G. May	E. P. Cole	S. T. Bowen	J. Hurty.
1857	B. C. Hobbs	B. T. Hoyt	S. T. Bowen	C. N. Todd.
1858	Caleb Mills	B. T. Hoyt	S. T. Bowen	C. N. Todd.
1859	E. P. Cole	A. C. Shortridge	S. T. Bowen	G. W. Hoss.
1860	G. A. Irvin	Hiram Hadley	S. T. Bowen	G. W. Hoss.
1861	Cyrus Nutt	John Cooper	S. T. Bowen	T. J. Vater.
1862	A. R. Benton	H. H. Young	J. H Smith	T. J. Vater.
1863	B. T. Hoyt	Miss H. N. Taylor	J. H. Smith	A. C. Shortridge.
1864	R. T. Brown	Miss E. Fulghum	J. H. Smith	A. C. Shortridge.
1865	G. W. Hoss	W. H. Wily	W. H. Demotte	Hiram Hadley.
1866	J. F. Tuttle	Miss E. Fulghum	J. T. Merrill	J. M. Olcott.
1867	A. C. Shortridge	R F. Brewington	Thomas Charles	G. P. Brown.
1868	Joseph Tingley	Miss E. C. Connell	Thomas Charles	J. H. Brown.
1869	D. E. Hunter	John Cooper	W. A. Bell	J. T. Merrill.
1870	A. M. Gow	Mrs. Emma McRea	Mrs. B. G. Cox	W. A. Bell.
1871	W. A Bell	Miss Rosa King	Miss A Churchill	J. H. Smart.
1872	J. H. Smart	I. F. Mills	J. A. Zeller	G. P. Brown.
1873	W. A. Jones	J. J. Mills	Mrs. G. P. Brown	E. H Butler.
1874	G. P Brown	Jas. A. Young	Mrs. L. A. Byers	H. B. McRea.
1875	W. H. Wiley	John Cooper	D. E. Hunter.	J. A. Zeller.
1876	J. H. Martin	R. A. Ogg	D. E. Hunter.	J. K Waltz.
1877	J. M. Bloss	Annie E. H. Lemon.	D. E. Hunter.	J. S Irwin.
1878	J. T. Merrill	Annie E. H. Lemon.	D. E Hunter.	H. B. Jacobs.
1879	John Cooper	Annie E. H. Lemon.	D. E. Hunter.	L. P. Harlan.
1880	H. B. Jacobs	Annie E. H. Lemon.	D. E. Hunter.	E. H. Butler.
1881	H. S. Tarbell	Annie E. H. Lemon.	D. E. Hunter.	R. G. Boone.
1882	Dr. John S. Irwin	Samuel Silby	D. E. Hunter.	J. N. Study.
1883	H. B. Hill	Samuel Silby	D. E Hunter.	E. E. Smith.
1884	E. E. Smith	Annie E. H Lemon.	D. E. Hunter.	Temple H. Dunn.
1885	Cyrus Hodgen	Annie E. H. Lemon.	D. E. Hunter.	Mrs. R. A. Moffett.
1886	Emma M. McRea	Annie E. H. Lemon.	D. E. Hunter.	Geo. F. Bass.
1887	Lewis H. Jones	Annie E. H. Lemon.	D. E. Hunter.	Robert Spear.
1888	J. A. Zeller	Annie E. H. Lemon.	D. E. Hunter.	J. W. Layne.
1889	W. W. Parsons	Annie E. H. Lemon.	D. E. Hunter.	D. W. Thomas.
1890	E. A. Bryan	Annie E. H. Lemon.	D. E. Hunter.	J. R. Hart.
1891	J. N. Study	Annie E. H. Lemon.	D. E Hunter.	M. Seiler.
1892	L. O. Dale	Anna Suter	J. R. Hart	A. E. Humke.
1893	Joseph Swain	Anna Suter	J. R. Hart	R. I. Hamilton
1894	Howard Sandison	Wila J. Hays	J. R. Hart	J. A. Carnagey.
1895	J. F. Scull	Helen Sanxey	J. R. Hart	W. A. Hester.
1896	R. A. Ogg	Emma B. Shealy	J R. Hart	T. F. Fitzgibbon.
1897	F. M. Stalker	Emma B. Shealy	J. R. Hart	W. S. Almond.
1898	W. H. Glascock		J. R. Hart	G. R. Wilson.
1899	R. I. Hamilton		J. R. Hart	W. P. Hart
1900	H. B. Brown	Leva M. Foster	J. R. Hart	Lawr'ce McTurnan.
1901	C. A. Prosser	Leva M. Foster	W. P. Hart	Chas. N. Peak.

PROGRAM STATE TEACHERS' ASSOCIATION, DECEMBER 26–28, 1901.

GENERAL ASSOCIATION—HOUSE OF REPRESENTATIVES.

Thursday, December 26, 8 p. m.

Invocation—The Rev. H. C. Meserve, Pastor Plymouth Church.
Music—Violin Solo, Prof. Fred Noble.
Address—Retiring President, Supt. R. I. Hamilton, Huntington.
Inaugural Address—"The Responsibilities of the Educator," President H. B. Brown, Valparaiso.
Music—Vocal Solo, Miss Effie C. Hessin.
Business—Appointment of committees and miscellaneous business.

Friday, December 27, 8:30 a. m.

Invocation—The Rev. Joshua Stansfield, Pastor Meridian St. M. E. Church
Music—Piano Solo, Miss Olive Kilgore.
Symposium—"What shall be Indiana's Next Steps in Education?"
a. As to "Ideals and Processes," Prof. Howard Sandison; 20 minutes.
b. As to "Reforms," Prof. Amos W. Butler; 20 minutes.
c. As to "School Economy," Supt. F. L. Jones; 20 minutes.
d. As to "Supervision," Supt. Chas. A. Van Matre; 20 minutes.
e. As to "Manual Training," Supt. R. I. Hamilton; 20 minutes.
f. As to "The Training of Teachers," Supt. D. M. Geeting; 20 minutes.
Discussion of the views presented in the Symposium, Prof. W. W. Parsons; 20 minutes.
Address—"Education Through Self-activity," Mrs. O. P. Kinsey, Valparaiso College.

Friday, December 27, 2 p. m

Music—Vocal Solo, Miss Effie C. Hessin.
Selection—By Mrs. C. W. Boucher.
Lecture—"Some Foundation Stones of Education," Prof. R. P. Halleck, Principal Male High School, Louisville, Ky.
"The Function of the Training School, Miss Anna Trueblood, State Normal Training School.
Discussion—Mrs. Elizabeth O. Copeland, Marion Normal College; Mrs. E. E. Olcott, Danville Normal College. General discussion.
Lecture—"Liquid Air, Its Uses and Possibilities," Prof. H. B. Thearle.
Note—Prof. H. B. Thearle will come prepared with apparatus and will make liquid air, which the audience will be allowed to examine. Dr. Glenn, of Georgia, says that Prof. Thearle's work is wonderful and will be highly valuable to the educator.

Friday, December 27, 8 p. m.

Music—Piano Solo, Miss Olive Kilgore.
Violin Solo, Prof. Fred Noble.
Address—Annual Address, "Fads," Supt. F. Louis Soldan, St. Louis, Mo.

Saturday, December 28, 8:30 a. m.

Invocation—The Rev. Carlos C. Rowlison, Pastor Third Christian Church.
Music—Violin Solo, Prof. Fred Noble.
Address—"The Teacher's Duties," Supt. F. Louis Soldan.
Address—"A National University," Dr. Joseph L. Swain, Indiana State University.
Report—Report of the Council of Education.
Discussion—General Discussion.
Reports—Reports of Committees and Miscellaneous Business.

(b) SOUTHERN INDIANA TEACHERS' ASSOCIATION.

While the State Teachers' Association has always exerted a great influence in directing the educational thought and moulding public sentiment in the State, it was observed soon after its organization that its influence was not as far-reaching as it should be. In order to "bring together, annually, a large number of teachers who seldom attend the sessions of the State Association, a number of superintendents and teachers from the southern part of the State met during the session of the State Teachers' Association" held in December, 1877, "and formed a new organization, called the 'Southern Indiana Teachers' Association.'" The attendance in 1902 was about 2,000.

PROGRAM BLOOMINGTON MEETING, APRIL 3, 4 AND 5, 1902.

GENERAL ASSOCIATION.

Thursday, April 3, 8 p. m.

Greetings—(a) From the City of Bloomington.
(b) From the Public Schools.
(c) From the University of Inidiana.
Response—Charles A. Prosser, Superintendent Schools, New Albany.
Address—Retiring President, C. N. Peake, Superintendent Schools, Princeton.
Inaugural Address—President J. H. Tomlin, Superintendent Schools, Shelbyville.
Business—Appointment of Committees, etc.
Social Function—General Reception to Teachers by the Women's Council of the city of Bloomington.

Friday, April 4, 9 a. m.

Invocation—Rev. T. J. Clark, Pastor Kirkwood Avenue Christian Church.
Address—"Thinking in Things and in Symbols," Dr. Nathan C. Schaeffer, Harrisburg, Pa.
Paper—"Education by Occupation," Dr. W. L. Bryan, University of Indiana.
Discussion—Principal R. F. Taylor, Colored High School, Jeffersonville.
Indiana as the State Teachers' Association.

Friday, April 4, 2 p. m

Address—"Grades of Thinking and Thinking in the Grades," Dr. Schaeffer.
Address—"Modernizing the Course of Study," W. A. Hester, Superintendent Schools, Evansville.
Discussion—Prof. F. M. Stalker, State Normal School, Terre Haute.
Address—"Art," Mr. A. M. Brooks, University of Indiana.

Friday, April 4, 8 p. m.

Annual Address—"The Central Factor in Education," F. Trendley, Superintendent Schools, Youngstown, Ohio.

Saturday, April 5, 8:30 p. m.

Invocation—The Rev. C. E. Clough, Pastor Baptist Church.
Address—"Does Education Pay?" Dr. Schaeffer.
Report—Committee on Revision of Constitution.
Business—Miscellaneous.

PRIMARY SECTION—WYLIE HALL, SECOND FLOOR (ROOM 36).

April 4, 2 p. m.

This work does not come to hand in time for publication.

MUSIC SECTION—WYLIE HALL, SECOND FLOOR (ROOM 36).

April 5, 8:30 a. m.

Paper—"Music in the Primary Grades," Miss Ella Duncan, Columbus.
Paper—"Sense and Nonsense, in Music Teaching," Arthur Mason, Columbus.
Discussions—(a) "Tone," Mr. Ridgeway Gebhart, New Albany.
(b) "Individual Work," Mr. J. M. Black, Washington.
Music—Vocal and instrumental, will be interspersed through the work of the session.

ART SECTION.

Exhibit in Woman's Gymnasium, open Friday and Saturday. Work in connection with this to be arranged

HIGH SCHOOL SECTION—WYLIE HALL, SECOND FLOOR (ROOM 36).

Friday, April 4, 9 a. m.

Paper—"General Secondary School Problems," W. S. Rowe, Superintendent of Schools, Connersville.
Discussion—A. O. Neal, Principal High School, Franklin; Lotus D. Coffman, Principal High School, Salem.
Paper—"The High School Principal and His Work," Edward G. Bauman, Principal High School Mt. Vernon.
Discussion—S. H. Hall, Borden College, Borden.
Paper—"Some Phases of High School English Composition Work," A. W. Senior, Department of English, University of Indiana.
Discussion—O. H. Greist, Department of English, Bedford High School; Clara Funk, Department of English, Jeffersonville High School.
General Discussion and Miscellaneous Business.

J. H. TOMLIN, President.
FANNIE WATTS, Secretary.
W. D. KERLIN, Treasurer.
J. K. BECK, Chairman Executive Committee.

(c) NORTHERN INDIANA TEACHERS' ASSOCIATION.

In order to accomplish the same results in northern Indiana that the Southern Association accomplished in the southern part of the State, an organization bearing the above name was effected at Island Park (Rome City, Ind.), July 9, 1883.

This Association has enrolled large numbers of teachers each year, bringing together teachers from all grades of school work. The attendance in April, 1902, was about 3,000.

PROGRAM OF THE SOUTH BEND MEETING, 1902.

GENERAL ASSOCIATION—STUDEBAKER AUDITORIUM.

Thursday, April 3, 2:30 p. m.

Music.
Invocation.
Music.
Address of Welcome—(a) On Behalf of the City, Hon. Schuyler Colfax, Mayor City of South Bend. (b) On Behalf of the Schools, Hon. John B. Stoll, President South Bend Board of Education.
Response—Supt. J. W. Carr, Anderson, Ind.
Address of Retiring President—Supt. J. W. Hamilton, Monticello, Ind.
President's Inaugural Address—Supt. A. H. Douglass, Logansport, Ind.
Music.
Miscellaneous Business and Announcements.
Appointment of Committees.
Adjournment.

Thursday, April 3, 8 p. m.

Illustrated Lecture—"Physical History of a World," Mr. Jacques W. Redway.
Music.
Announcements and Adjournment.

Friday, April 4, 9 a. m.

Music.
Invocation.
Music.
Address—"Some Traditions and Common Errors in Geography," Mr. Jacques Redway.
Intermission.
Physical Culture Drill by Pupils from South Bend.
Address—"Education and Democracy," Mr. Charles Zeublin.
Report of Committee on Division. Committee: T. A. Mott, Richmond; W. R. Snyder, Muncie; W. C. Bellman, Hammond; J. N. Study, Ft. Wayne; C. W. Benton, Indianapolis; W. A. Millis, Crawfordsville; B. F. Moore, Marion; Wm. Clem, South Bend.
Announcements and Adjournment.

IN THE AUDITORIUM.

Friday Evening, April 4, 8 o'clock.

Music.
Lecture—"American Painters and Sculptors of Today," Mr. Lorado Taft.

With this lecture are exhibited 120 beautiful illustrations of representative works of American painters and sculptors.
Announcements and Adjournment.

IN THE AUDITORIUM ANNEX.

Music.
Lecture—"Public Schools," illustrated by stereopticon, by Mr. Charles Zueblin.

This lecture gives views of school equipments, decorations, and classes at work in kindergarten, nature study, manual training, domestic science, vacation schools, commercial work, recreations and athletics.
Announcements and Adjournment.

Saturday Morning, April 5, 9 o'clock.

Music.
Invocation.
Music.
Address—"Rivers and the Lessons They Teach," Mr. Jacques W. Redway.
Music.
Address—"Social Organization," Mr. Charles Zueblin.
Reports of Committees and Election of Officers.
Miscellaneous and Adjournment.

SECTIONAL MEETINGS.

GRADE TEACHERS' SECTION—FIRST PRESBYTERIAN CHURCH.

Friday Afternoon, April 4, 2 o'clock.

Address—"Culture," Mr. Charles Zueblin.
Music.
Address—"Essentials in Primary Geography," Mr. Jacques W. Redway.
Election of Officers and Miscellaneous Business.

O. L. WOOLEY, Ft. Wayne, President.
J. H. WHITELY, Greenfield, Secretary.

HIGH SCHOOL SECTION—FIRST METHODIST CHURCH.

Friday, April 4, 2 p. m

Music.
Appointment of Committees.
Address—"Some Tendencies in Secondary Education," George H. Locke, A. M., Assistant Professor of Education Chicago University, and Editor of School Review.
Music.
"Status of Physical Culture in Secondary Schools," I. N. Warren, Laporte, Ind.
Paper—J. B. Pearcy, Anderson, Ind.
Miscellaneous Business and Election of Officers.

Immediately upon the conclusion of the above program the Section will take up a round table discussion of such topics as may be presented by its members.

J. Z. A. McCAUGHN, President, Kokomo, Ind.
S. C. HANSON, Ch. Ex. Com., Williamsport, Ind.
CATHARINE BLYNN, Ft. Wayne, Ind.

ART SECTION—STUDEBAKER AUDITORIUM.

Friday, April 4, 2 p. m.

Music.
Lecture—"A Glimpse of a Sculptor's Studio," or "How Statues Are Made," Mr. Lorado Taft.

This lecture is illustrated fully at each step by the actual process upon the stage.

Election of Officers and Miscellaneous Business.
Announcements and Adjournment.

There will be exhibited at the Central High School Building a collection of drawings from the public schools of various towns and cities in northern Indiana. There will also be an exhibit of class work from the Chicago Art Institute.

EVELYN K. DeCEW, Pres., Huntington, Ind.
JOSEPH SULLIVAN, Sec., Connersville, Ind.

COUNTRY AND VILLAGE SECTION—FIRST BAPTIST CHURCH.

Friday, April 4, 2 p. m.

Music.

"Uses and Abuses of Texts," Mr. B. A. Winnans, Berne, Ind.

Address—"Nature Study in Country Schools," Supt. W. H. Hershman, Hammond, Ind.

Paper—"Rewards as a Disciplinary Measure," Supt. W. S. Gibbons, Fulton Co., Ind.

Music.

Paper—"Religious Worship in Public Schools," Mr. Carl Beard, Oakford, Ind.

Report of Committees and Election of Officers.

Announcements and Adjournment.

The Executive Committee invites general discussion on each topic.

ELBERT LANGLEY, President, Center, Ind.
SUPT. GEO. W. WORLEY, Ch. Ex. Com., Warsaw.
MARIE KELLY, Secretary, Muncie, Ind.

MUSIC SECTION—LECTURE ROOM FIRST METHODIST CHURCH.

Friday, April 4, 2 p. m.

Music.

Appointment of Committees and Miscellaneous Business.

Paper—"Is it Practical to Make Independent Readers of Children in the First Four Years of School?" Wm. Niles, Ft. Wayne.

Discussion—Dessa Kilander, Winamac.

Music.

Report of Committees and Election of Officers.

On the completion of the above program the Section will take up the following:

Questions for Round Table Discussion.

1. How much general culture outside his immediate specialty should the Director of Music have? How much special training?
2. Should the Director of Music, any more than the regular teacher, be absent from meetings when matters of method and discipline are under consideration?
3. When parents and the Director of Music disagree as to what part the child should sing, what is the proper course to pursue?
4. Should the room teacher be allowed to employ a teacher to instruct her pupils in music?
5. What is to be done with a pupil who absolutely can not sing, if there be such?
6. The rhythmic element and its development in child-life.
7. Cause and cures for singing "off pitch."

8. Should patriotic songs be sung while pupils are seated?

9. A practical lesson on some music problems suggested by members of the Music Section.

Note.—Supervisors are invited to write and to hand the President of the Music Section the problem they wish to have demonstrated and choice will be made from the suggestions offered.

L. M. TILSON, President, Lebanon.
WILL EARHART, Ch. Ex. Com., Richmond.

HEADQUARTERS—AUDITORIUM ANNEX, 207 SOUTH MICHIGAN STREET.

The Annex will be open at all hours to all members of the association and their friends. Make this your downtown home during the association.

Offices: Room 1, Treasurer; Room 2, Executive Committee; Room 3, Local Committee.

Baggage will be checked at the office of the local committee, where porters and guides will be in waiting.

OFFICERS.

President—A. H. Douglas, Logansport.
Vice-President—Alexander Thompson, Marion.
Secretary—Miss Margaret Porch, Anderson.
Treasurer—W. A. Millis, Crawfordsville.
R. R. Secretary—T. A. Mott, Richmond.
Chairman Business Committee—Calvin Moon, South Bend.
President Grade Section, O. S. Wooley, Ft. Wayne.
President High School Section—J. Z. A. McCaughn, Kokomo.
President County and Village Section—Elbert Langley, Center.
President Music Section—L. M. Tilson, Lebanon.
President Art Section—Miss Evelyn DeCew, Huntington.
President Penmanship Section—J. H. Bachtenkircher, Lafayette.

Executive Committee—John A. Wood, Chairman, Laporte; H. C. Heironimus, Richmond; T. E. Kinzie, Indianapolis; W. E. Ervin, Muncie; Daniel Freeman, Crawfordsville; Edward Ayres, Lafayette; L. T. Turpin, Kokomo; D. A. Lambright, Kendallville; Walter Dunn, Knox.

Local Business Committee—William Clem, South Bend; Charles H. Bartlett, South Bend; John H. Rittinger, New Carlisle; Essie B. Dakin, South Bend; Sarah E. Kirby, South Bend; Ludwig S. Fickenscher, River Park; Alice E. Hill, South Bend; John A. Byers, South Bend; Winona Dodd, South Bend; Calvin Moon, Chairman, South Bend.

(d) THE ASSOCIATION OF CITY AND TOWN SUPERINTENDENTS.

During the year 1899 a controversy arose over the distribution of the public school revenues. The county superintendents and others representing the interests of the county schools held that the method of distributing the State's school revenues in proportion to the enumeration of children of school age discriminated against the country, beacuse the enumeration in cities was not accurately taken. They charged that in some cities the lists were deliberately padded by the enumerators to increase their pay for taking the enumeration. The question assumed such proportions that it became evident that wisdom must be used to prevent an injury to the school interests of the State.

Prompted by a desire to aid in the solution of the problem, at the meeting of the State Teachers' Association in 1889, a few of the city superintendents met together on December 26, to consult and agreed to organize an association of city and town superintendents corresponding to the County Superintendents' Association. Superintendent J. N. Study, of Richmond, presented a plan of organization, which, with sundry modifications, was adopted.

The following officers were then elected: President, L. H. Jones, Indianapolis; vice-president, R. I. Hamilton, Huntington; secretary, R. A. Ogg, Greencastle; treasurer, J. T. Merrill, Lafayette; executive committee, J. N. Study, chairman, Richmond; E. H. Butler, Rushville; W. H. Wiley, Terre Haute; P. P. Stultz, Jeffersonville; W. R. Snyder, Muncie; Sheridan Cox, Kokomo.

A second session was held at which a number of other superintendents were present. Work was assigned to various committees, which were to investigate and report at the next meeting. Some of these questions were: Is the school enumeration less honestly taken in the city than in the country? Is there any reason in the nature of things why the ratio of children of school age to the census should differ in the city and country? Are there any reasons why city schools should naturally show a smaller enrollment upon enumeration than the country schools? Relative cost per capita per day in city and country?

On November 20, 1890, the second meeting was held and the reports on the various questions were heard and discussed. It was

felt as a result of the investigation that the system of distribution of revenues was not unjust to any interest of either country or city, if honestly administered, and it was agreed that the association should labor to secure such amendments to the law as would insure equity.

The question at issue between country and city was given formal consideration at the following meeting of the State Teachers' Association by a discussion of its merits on the one side by the State Superintendent and two County Superintendents, and on the other by three City Superintendents. The result was a law requiring a rigid system of enumeration, and what threatened to divide the educational forces of the State resulted in bringing them into greater unity and better understanding.

This controversy having been happily settled, the Association began its legitimate work of discussing topics of general interest to the city and town schools. At the meeting on November 12, 1891, "Methods of Promotion," "The Uniformity of Commissioned High Schools," "The Superintendent's Term of Office," etc., were discussed. The records show that for two years the leading questions considered by the Association related to examinations, promotions and the uniform text-book law. In 1893 a departure was made which has prevailed ever since, viz., that of appointing committees to make certain investigations and do certain work, and report to the following meeting.

Three of these reports were presented and discussed in 1894, viz., "Systems of Promotion," by R. A. Ogg; "School Examinations," by Edward Ayres; "Hindrances to the Highest Efficiency of Town and City Schools," by J. W. Carr.

The great "Report of the Committee of Ten," from the National Educational Association had called out a great interest in the question of what should constitute the school curriculum, and on motion of Mr. Ayres, the president, D. W. Thomas, of Elkhart, appointed a committee to prepare "a report on a course of study for the public schools, said report to indicate the principles which should underlie such a course of study, and to contain an outline of the work of the public schools as determined by said principles." The committee was made to consist of R. A. Ogg, chairman; W. R. Snyder, W. H. Sims, W. C. Belman, W. P. Burris. The time of the meeting in 1895 was largely occupied by

the discussion of this report. The course as proposed by the committee was unanimously approved for trial for one year and the committee asked to report at the next meeting such modifications as the experience of the superintendents might suggest. At the meeting in 1896 the committee reported no changes called for, and after discussion the course was adopted without dissent. Superintendent Woody then moved that a committee of forty, eight for each of the five lines of study, grammar, arithmetic, geography, reading and history, be appointed to amplify the work planned by the original committee. These various committees reported in 1897, and after discussion the reports were referred to the chairman of the various committees with Superintendent Weaver, president of the Association, as chairman, to unify and print the course as thus developed.

At the November meeting of 1898 this final report was adopted. This discussion of course of study running through four years has added largely to the efficiency of superintendents, the discussion bringing out the fundamental principles of education. Coupled with this was a fine address at the meeting in 1897 on "The Principles That Underlie the Formation of a Course of Study, and Which Constitute the Canons of Criticism," by Lewis H. Jones, of Cleveland, O., formerly superintendent of Indianapolis schools, and the first president of the Association.

At the meeting in 1899 the matter of greatest interest was a report on the uniform course of study for high schools, with Supt. W. A. Millis as chairman. An excellent report was presented and a full discussion was had. The result will be to further unify the work in our high schools, though it seems unlikely that as large a unity will prevail as in the lower grades because of the more diverse conditions under which the high schools work. The awakened interest in the subject of art in the schools was given impetus by two excellent addresses from Dr. W. L. Bryan, of the State University, and Prof. J. L. Lowes, of Hanover College.

The meeting of 1900 was characterized by three reports, one on "The School in Relation to Institutional Life," by W. H. Glascock, Bloomington, Edward Ayres, Lafayette, and M. W. Harrison, Wabash; one on "The School as Related to Art," by W. R. Snyder, Muncie, and Mary E. Nicholson, Indianapolis; and one on "Spelling Book," by W. F. L. Sanders, Connersville. The first of these

was a printed report. All elicited much interest and discussion. The meetings of 1899 and 1900 were characterized by a departure in the way of a dinner on Friday evening, at which time a welcome was extended to all new superintendents, and they were called upon to respond, that the Association might become acquainted with them. In 1900 this occasion was made very enjoyable by a fine address on "Shylock," by Judge W. D. Robinson of the Appellate Court. While it is a Superintendents' Association, the friends of the colleges and normal schools are invited and a number of them attend and participate in the discussions.

It is safe to say that the Association of City and Town Superintendents is the most distinctively pedagogical organization of the State, and since its organization has done more than any other to mould the educational sentiment of the State. Its work is rather that of a round table, papers seldom being read, and discussions being as informal as possible. It is not a meeting for pyrotechnics, but for discussion by all who choose to participate. It has grown from a small company to an annual gathering of over one hundred from all parts of the State.

PROGRAM CITY SUPERINTENDENTS' ASSOCIATION, 1901.

ANNUAL MEETING OF THE CITY AND TOWN SUPERINTENDENTS, NOVEMBER 7, 8 AND 9, 1901.

HOUSE OF REPRESENTATIVES.

Thursday, 8:00 p. m.

Presentation of Report of Committee—"Course in Nature Study for Common Schools," Supt. H. B. Wilson, Salem, Chairman, and Dr. Sherman Davis, Bloomington.
Miscellaneous Business.

Friday, 9:00 a. m.

Discussion of Preceding Report—Opened by Supt. C. M. McDaniel, Madison, and Supt. J. W. Hamilton, Monticello.
Miscellaneous Business.

Friday, 2:00 p. m.

Report on "Art and Schoolroom Decoration," Supt. W. R. Snyder, Muncie.
Paper—"Art in Connection with the Teaching of Geography and History," Mrs. Della Quivey Stabler, Noblesville.
General Discussion.

Friday, 8:00 p. m.

Meeting in Club Room, Parlor Floor, Hotel English, or House Chamber.

Address—"School Boards and Superintendents," William George Bruce, Editor American School Board Journal, Milwaukee, Wis.

Discussion—Hon. A. M. Sweeney, Member Board of School Commissioners, Indianapolis; Hon. W. F. Ellis, Member Board of Education, Anderson; Rev. Wilson Blackburn, Member Board of Education, Mount Vernon.

Saturday, 9:00 a. m.

Round Table Discussion of some of the following, or other topics:

1. Defects of State Text-books.
2. School Boards and Superintendents.
3. Legal Qualifications for Town and City Superintendents.
4. The Dominant Thought in Educational Progress Today.
5. Social Responsibility of the School.
6. Constants and Electives in the High School.
7. Present Tendencies in Secondary Schools.

OFFICERS.

J. B. Fagan, Frankton, President.
H. S. Hippenstiel, North Manchester, Vice-President.
G. L. Roberts, Frankfort, Secretary.
H. G. Woody, Greencastle, Treasurer.
W. P. Hart, Covington, R. R. Secretary.

Executive Committee—Edwin S. Monroe, Mount Vernon, Chairman; L. E. Kelley, Montpelier; R. L. Thiebaud, Rising Sun; I. F. Mather, East Chicago; I. V. Busby, Alexandria; J. F. Rieman, Goshen.

Committee to Report on "Course in Nature Study for Common Schools"—H. B. Wilson, Salem, Chairman; Dr. Stanley Coulter, Lafayette; W. C. Belman, Hammond; L. E. Wheeler, Monticello; Dr. Sherman Davis, Bloomington.

Committee to Report on "Art and Schoolroom Decoration"—W. R. Snyder, Muncie, Chairman; E. S. Monroe, Mount Vernon; C. M. McDaniel, Madison; W. H. Glascock, Bloomington; W. H. Wiley, Terre Haute; W. A. Millis, Crawfordsville; T. A. Mott, Richmond; C. N. Kendall, Indianapolis; J. N. Study, Ft. Wayne; J. A. Wood, Laporte; H. B. Wilson, Salem; A. E. Humke, Vincennes; J. H. Tomlin, Shelbyville; R. A. Ogg, Kokomo; W. A. Wirt, Bluffton; B. J. Bogue, Mishawaka.

(e) COUNTY SUPERINTENDENTS' STATE ASSOCIATION.

State Superintendent of Public Instruction, Milton B. Hopkins, called the first State meeting of County Superintendents. The convention assembled in the High School Hall at Indianapolis, July 22, 1873. From that time the association has met annually,

and has been of incalculable service to the State. In the early meetings many questions arose as to the duties of the Superintendents under the new laws. Following the adjustment of these questions the Superintendents addressed themselves to the educational questions of the day. Such questions as the following claimed the attention of the first Superintendents:

1. The examination of teachers.
2. Visiting schools.
3. Township and County Institute work.
4. Duties of the County Board of Education, etc.

A few years later they began the study of such subjects as—

1. Course of study for the rural schools.
2. Classification and gradation.
3. The graduation of pupils from the common branches.
4. Uniform outline of Township Institute work, etc.

They prepared and had printed a course of study for the rural schools and Outlines of Township Institute work. The preparation of these documents was placed in the State Department of Public Instruction, December, 1894.

For several years the association has been preparing the questions for the examination of pupils in the grades and high schools of the townships and small towns.

Following is a program of the last meeting of the Superintendents:

PROGRAM.

COUNTY SUPERINTENDENTS' SECTION—SUPREME COURT ROOM (ROOM 67).

Wednesday, June 25, 1902, 2:00 p. m.

Invocation—E. E. Robey, Superintendent Howard County.
"The Truancy Law"—S. A. Harris, Superintendent Putnam County.
Discussion—Led by W. F. Landes, Superintendent Marion County.
"Young People's Reading Circle of Indiana"—A. L. Gary, Superintendent Rush County.
"How to Improve the District Schools"—J. D. Hostetter, Superintendent Hendricks County.
Discussion—Led by E. A. Hutchens, Superintendent Hamilton County.
Report of Committee on Uniform Blanks—G. R. Wilson, Superintendent Dubois County.
Miscellaneous Business.

Thursday, June 26, 9:30 a. m.

Reading—Selected—Lee O. Harris, Superintendent Hancock County.
"Music in the District Schools"—C. A. Robertson, Superintendent Crawford County.
Discussion—Led by J. H. Clark, Superintendent Bartholomew County.
"Is the Course of Study Sufficiently Practical?"—W. E. Stipp, Superintendent Lawrence County.
Discussion—Led by S. L. Scott, Superintendent Clark County.
"Indiana Teachers' Reading Circle"—J. M. Neet, Superintendent Parke County.
"Pages from My Visiting Record"—A. B. Thompson, Superintendent Grant County.
Discussion—Led by Superintendent W. L. Kellenberger, Superintendent Newton County.
Adjournment.

Thursday, June 26, 1:30 p. m.

Address—"The State Schools for Defective"—Hon. Alexander Johnson, Ft. Wayne.
"How to Make the Township Institute More Profitable"—I. F. Meyer, Superintendent Carroll County.
Discussion—Led by D. N. Hayden, Superintendent Switzerland County.
"The District Graduate"—G. E. Butcher, Superintendent Starke County.
Discussion—Led by William Clem, Superintendent St. Joseph County.
Appointment of Committees and other Miscellaneous Business.

Friday, June 27, 9:00 a. m.

"How Can the Standard of Teachers be Raised?"—E. C. Crider, Superintendent Tippecanoe County.
Discussion—Led by R. C. Hillis, Superintendent Cass County.
"Uniform Course of Study for High Schools"—J. H. Reddick, Superintendent Pulaski County.
Discussion—Led by W. O. Baker, Superintendent Morgan County.
"Free-Text-books"—H. D. Shideler, Superintendent Huntington County.
Discussion—Led by W. B. Walkup, Superintendent Montgomery County.
"Needed School Legislation"—E. A. Gladden, Superintendent Scott County.
Discussion—Led by H. E. Cushman, Superintendent Greene County.

LOUIS H. HAMILTON, President, Rensselaer.
E. A. GLADDEN, Secretary, Scottsburg.

(f) COUNTY ASSOCIATIONS.

Notwithstanding the fact that the attendance in the State association grew rapidly, from year to year, and enrolled teachers from all grades of school work, there were a great many prominent educators who believed that there was yet a larger and still more important field for association work in Indiana. In response to this general feeling of the need for an annual meeting that would reach

all the teachers in the State, the County Teachers' Associations were organized in the several counties. These associations are the most efficient agencies in promoting the interests of the rural and village schools. If they should hold two or three sessions annually much better results would follow. Occurring as they do after the schools have been in session, at a time when the teachers really feel the need of inspiration and helpful suggestions, the County Associations exert a greater influence in the improvement of teachers than the County Institutes. The meetings should always be, and as a rule are, conducted under efficient supervision, with instructors capable of increasing the range of thought of teachers.

In many of our counties the annual associations are the most helpful meetings in our system.

The first associations were instructed largely by home talent, but in recent years the best men in the faculties of our colleges and normal schools have been drafted into the work. As a result of this change, the professional spirit is growing. Teachers are studying educational problems as they never have before. If nothing more should come from these meetings than the good from merely getting away from home for a day or two and making new acquaintances, the associations are worth much to the profession. But there is more than the social element and the rest.

There has been improvement in all of our associations during recent years, and if all are faithful in attending these meetings we shall surely reap large rewards in time to come.

(g) COUNTY INSTITUTES.

The Law.

[1901, p. 29. Approved and in force February 25, 1901.]

County Institutes.—In order to the encouragement of Teachers' Institutes, the County Auditors of the several counties of this State shall, whenever the County Superintendent of such county shall file with said Auditor his official statement, showing that there has been held, for five days, a Teachers' Institute in said county, with an average attendance of twenty-five teachers, or of persons preparing to become such, draw his warrant on the County Treasurer, in favor of said County Superintendent, for thirty-five dollars; and in case there should be an average attendance of forty

teachers, or persons preparing to become such, then the said County Auditor shall draw his warrant on the Treasurer for fifty dollars; and in case there should be an average attendance of seventy-five teachers, or persons preparing to become such, then the County Auditor shall draw his warrant on the Treasurer for one hundred dollars, for the purpose of defraying the expenses of said Institute: Provided, however, That but one of said payments be made in the same year. All laws and parts of laws in conflict herewith are hereby repealed.

1. Superintendent's Duty and Pay.—Such an institute as is contemplated by the law is not a voluntary association, but a teachers' meeting, at the head of which is the County Superintendent. He, therefore, has no right to surrender it into the hands of an incompetent director, nor to permit a course of procedure by any one, or by the Institute itself, by which time shall be wasted or unsatisfactory work done. The teachers are there to be instructed, and the Superintendent must necessarily take the responsibility of the Institute upon himself. The money which the Auditor is authorized to pay is to defray the expenses of the Institute exclusive of the per diem of the Superintendent, whose compensation must be obtained in the usual way. He is also entitled to his per diem for reasonable services in making preparations for the Institute.

2. Pay of Teachers.—Teachers are allowed their regular per diem when attending both County and Township Institutes.

Schools Closed.—When any such Institute is in session, the common schools of the county in which said Institute shall be held shall be closed. (R. S. 1881, §4522; R. S. 1894, §6011; R. S. 1897, §6231.)

Sessions.—The several County Superintendents are hereby required, as a part of their duty, to hold, or cause to be held, such Teachers' Institutes at least once in each year in their respective counties. (R. S. 1881, §4523; R. S. 1894, §6012; R. S. 1897, §6233.)

The County Superintendents have entire charge of the County Institutes. They fix the time of holding the meetings, employ instructors, etc., the only statutory requirement being that one Institute shall be held annually. There is an appropriation of nearly $100 in each county for the support of such Institute, when the average daily attendance is seventy-five or more. Since no county has an attendance below that number, the annual appropriation by the State is $8,462.40. The remainder of the cost is borne by the teachers.

The total cost of County Institutes in the ninety-two counties is $21,469.53.

Institutes were held in 1902 according to the following schedule:

Adams	Decatur	August 25-29.
Irvin Brandyberry	County Superintendent	Decatur.
Frank L. Jones	Instructor	Indianapolis.
W. E. Henry	Instructor	Indianapolis.
F. J. Cozine	Instructor (Music)	Chicago, Ill.
Allen	Fort Wayne	
F. J. Young	County Superintendent	Fort Wayne.
Bartholomew	Columbus	August 18-22.
James H. Clark	County Superintendent	Columbus.
J. W. Redway	Instructor	Mount Vernon, N. Y.
T. S. Lowden	Instructor	Greencastle.
Arthur W. Mason	Instructor (Music)	Columbus.
Benton	Fowler	August 18-22.
L. A. McKnight	County Superintendent	Fowler.
D. M. Geeting	Instructor	Greensburg.
Francis M. Stalker	Instructor	Terre Haute.
Blackford	Hartford City	August 25-29.
Finley Geiger	County Superintendent	Hartford City.
W. W. Black	Instructor	Normal, Ill.
E. H. Lindley	Instructor	Bloomington.
Boone	Lebanon	November 24-28.
R. H. Harney	County Superintendent	Lebanon.
Jonathan Rigdon	Instructor	Danville.
Otis W. Caldwell	Instructor	Charleston, Ill.
Louis J. Rettger	Instructor	Terre Haute.
Brown	Nashville	August 24-29.
A. A. Manuel	County Superintendent	Beck.
O. P. Robertson	Instructor	Cambridge, Mass.
T. A. Mott	Instructor	Richmond.
A. W. Mason	Instructor (Music)	Columbus.
Carroll	Delphi	August 25-29.
I. F. Myer	County Superintendent	Delphi.
Ellwood W. Kemp	Instructor	Terre Haute.
Cass	Logansport	September 15-19.
Robert C. Hillis	County Superintendent	Logansport.
Robert J. Aley	Instructor	Bloomington.
W. W. Parsons	Instructor	Terre Haute.
Mrs. E. O. Copeland	Instructor	Marion.
Clark	Charlestown	September 8-12.
S. L. Scott	County Superintendent	Jeffersonville.
Sanford Bell	Instructor	Worcester, Mass.
F. D. Fess	Instructor	Ada, Ohio.
J. F. Kinsey	Instructor (Music)	Chicago, Ill.

Clay	Brazil	September 1-5.
J. M. Tilley	County Superintendent	Brazil.
Howard Sandison	Instructor	Terre Haute.
Frank L. Jones	Instructor	Indianapolis.
Clinton	Frankfort	August 4-8.
J. H. Grover	County Superintendent	Frankfort.
R. J. Aley	Instructor	Bloomington.
W. W. Black	Instructor	Normal, Ill.
H. J. Cozine	Instructor (Music)	Chicago, Ill.
Crawford	English	August 25-30.
C. A. Robertson	County Superintendent	English.
A. J. Kinnaman	Instructor	Worcester, Mass.
Mrs. Emma Mont McRae	Instructor	Lafayette.
M. S. Brown	Instructor (Music)	Indianapolis.
Daviess	Washington	August 11-15.
Wm. A. Wallace	County Superintendent	Washington.
D. W. Dennis	Instructor	Richmond.
Sanford Bell	Instructor	Worcester, Mass.
R. V. Black	Instructor	Chicago, Ill.
Dearborn	Lawrenceburg	August 18-22.
S. K. Gold	County Superintendent	Lawrenceburg.
W. W. Parsons	Instructor	Terre Haute.
C. W. Lewis	Instructor	Moores Hill.
Decatur	Greensburg	October 6-10.
Elmer C. Jerman	County Superintendent	Greensburg.
A. E. Bestor	Instructor	Franklin.
Dekalb	Auburn	August 25-29.
H. E. Coe	County Superintendent	Auburn.
W. W. Parsons	Instructor	Terre Haute.
Mrs. E. E. Olcott	Instructor	Danville.
Delaware	Muncie	September 1-5.
C. A. Van Matre	County Superintendent	Muncie.
Jacques Redway	Instructor	New York.
Ellen Russell	Instructor (Music)	Muncie.
Dubois	Jasper	August 11-15.
Geo. R. Wilson	County Superintendent	Jasper.
John W. Carr	Instructor	Anderson.
S. L. Davis	Instructor	Bloomington.
E. R. Mason	Instructor	Chicago, Ill.
W. W. Pfrimmer	Instructor	Kentland.
Mabel Neal	Instructor	Indianapolis.
Elkhart	Goshen	January 5-9, 1903.
Geo. W. Ellis	County Superintendent	Goshen.
Fayette	Connersville	August 25-29.
Calvin Ochiltree	County Superintendent	Connersville.
Henry L. Cannon	Instructor	Cincinnati, Ohio.
J. E. McGilvery	Instructor	Cleveland, Ohio.

Floyd	New Albany	September 8-12.
Levi H. Scott	County Superintendent	New Albany.
Robert Hall	Instructor	Indianapolis.
A. J. Kinnaman	Instructor	Worcester, Mass.
Fountain	Covington	August 18-22.
Grant Gossett	County Superintendent	Covington.
Robert Hall	Instructor	Indianapolis.
Charles F. Miller	Instructor	Boswell.
Franklin	Brookville	August 25-29.
Will H. Senour	County Superintendent	Brookville.
R. J. Aley	Instructor	Bloomington.
E. O. Holland	Instructor	Louisville, Ky.
Fulton	Rochester	November 24-29.
W. S. Gibbons	County Superintendent	Rochester.
Gibson	Princeton	August 25-29.
John T. Ballard	County Superintendent	Princeton.
T. S. Lowden	Instructor	Greencastle.
Jessie Lee Newlin	Instructor	Chicago, Ill.
C. W. Day	Instructor	Oakland City.
M. R. Kirk	Instructor	Vincennes.
Grant	Marion	September 1-5.
A. B. Thompson	County Superintendent	Marion.
Ellwood W. Kemp	Instructor	Terre Haute.
Greene		
H. E. Cushman	County Superintendent	Bloomfield.
Hamilton	Noblesville	September 8-12.
E. A. Hutchens	County Superintendent	Noblesville.
W. W. Parsons	Instructor	Terre Haute.
J. P. Naylor	Instructor	Greencastle.
Hancock	Greenfield	September 8-12.
Lee O. Harris	County Superintendent	Greenfield.
Frank L. Jones	Instructor	Indianapolis.
Harrison	Corydon	August 18-22.
Amzi Weaver	County Superintendent	Corydon.
A. J. Kinnaman	Instructor	Worcester, Mass.
Julia Fried	Instructor	Corydon.
Hendricks	Danville	August 18-22.
J. D. Hostetter	County Superintendent	Danville.
Sherman L. Davis	Instructor	Bloomington.
Henry	New Castle	August 11-15.
J. A. Greenstreet	County Superintendent	New Castle.
Thomas Newlin	Instructor	Wilmington, Ohio.
J. E. McGilvery	Instructor	Cleveland, Ohio.

Howard	Kokomo	August 25-29.
E. E. Robey	County Superintendent	Kokomo.
Clifton F. Hodge	Instructor	Worcester, Mass.
John L. Lowes	Instructor	Hanover.
Otis G. Stanton	Instructor	Indianapolis.
L. D. Eichhorn	Instructor (Music)	Bluffton.
Huntington	Huntington	September 1-5.
H. D. Shideler	County Superintendent	Huntington.
John L. Lowes	Instructor	Hanover.
Jackson	Brownstown	August 18-23.
J. E. Payne	County Superintendent	Brownstown.
D. W. Dennis	Instructor	Richmond.
J. F. Kinsey	Instructor	Chicago, Ill.
Jasper	Rensselaer	September 1-5.
Louis H. Hamilton	County Superintendent	Rensselaer.
R. P. Holleck	Instructor	Louisville, Ky.
E. O. Holland	Instructor	Louisville, Ky.
L. D. Eichhorn	Instructor (Music)	Bluffton.
Jay	Portland	September 1-5.
F. L. Crowe	County Superintendent	Portland.
N. C. Schaeffer	Instructor	Harrisburg, Pa.
Andrew Stephenson	Instructor	Greencastle.
John A. Hill	Instructor	Portland.
Jefferson	Madison	August 25-29.
Geo. S. Taylor	County Superintendent	Madison.
Eli F. Brown	Instructor	Battle Creek, Mich.
Horace Ellis	Instructor	Franklin.
Jennings	Vernon	August 11-15.
M. W. Deputy	County Superintendent	Vernon.
Mrs. Emma Mont McRae	Instructor	Lafayette.
Chas. M. Curry	Instructor	Terre Haute.
Johnson	Franklin	September 8-12.
John W. Terman	County Superintendent	Franklin.
Lewis D. Bonebrake	Instructor	Columbus, Ohio.
Sherman L. Davis	Instructor	Bloomington.
W. W. Pfrimmer	Instructor	Kentland.
Knox	Vincennes	September 1-5.
Peter Phillippi	County Superintendent	Vincennes.
M. V. O'Shea	Instructor	Madison, Wis.
Sanford Bell	Instructor	Worcester, Mass.
Kosciusko	Winona Lake	August 11-16.
Geo. W. Worley	County Superintendent	Warsaw.
Faculty of Winona	Instructors	Winona Lake.
Lagrange	Lagrange	August 25-29.
H. S. Gilhams	County Superintendent	Lagrange.
Adelaide S. Baylor	Instructor	Wabash.

Lake	Crown Point	August 18-22.
Frank E. Cooper	County Superintendent	Crown Point.
W. W. Black	Instructor	Normal, Ill.
Laporte	Laporte	August 25-29.
E. G. Bunnell	County Superintendent	Laporte.
W. L. Bryan	Instructor	Bloomington.
John A. Wood	Instructor	Laporte.
Robert M. Smith	Instructor	Chicago, Ill.
R. V. Block	Instructor (Music)	Coulterville, Ill.
Lawrence	Bedford	September 1-5.
W. E. Stipp	County Superintendent	Mitchell.
Mrs. Emma Mont McRae	Instructor	Lafayette.
J. E. McGilvery	Instructor	Cleveland, Ohio.
H. H. Holmes	Instructor	Kansas City, Mo.
E. R. Mason	Instructor (Music)	Chicago, Ill.
Madison	Anderson	September 1-5.
James W. Frazier	County Superintendent	Anderson.
C. W. Hodge	Instructor	Worcester, Mass.
Henry Houk	Instructor	Harrisburg, Pa.
Marion	Indianapolis	August 25-29.
W. F. Landes	County Superintendent	Indianapolis.
D. W. Dennis	Instructor	Richmond.
Howard Sandison	Instructor	Terre Haute.
Marshall	Plymouth	August 25-29.
George D. Marks	County Superintendent	Plymouth.
Francis M. Stalker	Instructor	Terre Haute.
W. F. Ellis	Instructor	Bremen.
Daniel Holm	Instructor	Bourbon.
Martin	Loogootee	August 11-15.
E. McFarland	County Superintendent	Shoals.
E. W. Kemp	Instructor	Terre Haute.
A. J. Kinnaman	Instructor	Worcester, Mass.
Miami	Peru	September 1-5.
E. H. Andrews	County Superintendent	Peru.
S. L. Heeter	Instructor	Converse.
Adelaide S. Baylor	Instructor	Wabash.
John A. Hill	Instructor	Portland.
H. L. Hall	Instructor	Peru.
Monroe	Bloomington	August 4-9.
W. V. Payne	County Superintendent	Bloomington.
Ernest Holland	Instructor	Bloomington.
John W. Carr	Instructor	Anderson.
Montgomery	Crawfordsville	November 24-28.
W. B. Walkup	County Superintendent	Crawfordsville.
Morgan	Martinsville	November 24-28.
W. O. Baker	County Superintendent	Martinsville.
Sherman L. Davis	Instructor	Bloomington.
N. C. Shaeffer	Instructor	Harrisburg, Pa.

Newton	Goodland	August 18-22.
W. L. Kellenberger	County Superintendent	Kentland.
W. H. Hershman	Instructor	Hammond.
Robert J. Aley	Instructor	Bloomington.
E. R. Mason	Instructor (Music)	Chicago.
Noble	Albion	August 25-29.
E. L. Adair	County Superintendent	Albion.
W. N. Ferris	Instructor	Big Rapids, Mich.
D. Lange	Instructor	St. Paul, Minn.
Virginia Carr	Instructor (Music)	Greencastle.
Ohio	Rising Sun	
E. S. Espey	County Superintendent	Rising Sun.
Orange	Paoli	August 4-8.
C. L. Rankin	County Superintendent	Paoli.
Wm. Emory Smyser	Instructor	Delaware, Ohio.
Horace Ellis	Instructor	Franklin.
Owen	Spencer	August 18-22.
B. M. Hancock	County Superintendent	Spencer.
Ellwood W. Kemp	Instructor	Terre Haute.
Edwin W. Chubb	Instructor	Athens, Ohio.
Nannie C. Love	Instructor (Music)	Muncie.
Parke	Rockville	August 18-22.
Jesse M. Neet	County Superintendent	Rockville.
John Engle	Instructor	Ogden, Utah.
Charles A. McMurry	Instructor	DeKalb, Ill.
Perry	Tell City	September 1-5.
Logan Esarey	County Superintendent	Cannelton.
Pike	Winslow	August 11-15.
J. D. Grimes	County Superintendent	Oakland City.
Eli F. Brown	Instructor	Battle Creek, Mich.
Wm. E. Smyser	Instructor	Delaware, Ohio.
M. S. Brown	Instructor	Indianapolis.
Porter	Valparaiso	September 1-5.
A. A. Hughart	County Superintendent	Valparaiso.
Delos Fall	Instructor	Lansing, Mich.
Frank S. Fox	Instructor	Columbus, Ohio.
Posey	Mt. Vernon	November 24-28.
Charles Greathouse	County Superintendent	Mt. Vernon.
Pulaski	Winamac	September 1-5.
J. H. Reddick	County Superintendent	Winamac.
Wm. E. Smyser	Instructor	Delaware, Ohio.
S. D. Fess	Instructor	Ada.
J. N. Hurty	Instructor	Indianapolis.
Virginia Carr	Instructor	Greencastle.
Putnam	Greencastle	August 25-29.
Samuel A. Harris	County Superintendent	Greencastle.
Charles McKinney	Instructor	Milwaukee, Wis.

Randolph	Winchester	August 25-29.
C. W. Paris	County Superintendent	Farmland.
Oscar G. Puckett	Instructor	Winchester.
Anna Logan	Instructor	Cincinnati, Ohio.
H. L. Bruner	Instructor	Indianapolis.
Ripley	Versailles	August 18-22.
Chas. S. Royce	County Superintendent	Versailles.
L. J. Rettger	Instructor	Terre Haute.
C. M. Curry	Instructor	Terre Haute.
H. J. Cozine	Instructor (Music)	Chicago, Ill.
Rush	Rushville	August 18-22.
W. A. Stockinger	County Superintendent	Rushville.
Sanford Bell	Instructor	Worcester, Mass.
J. F. Brumbaugh	Instructor	Greencastle.
Scott	Scottsburg	August 18-22.
Elijah A. Gladden	County Superintendent	Scottsburg.
Horace Ellis	Instructor	Franklin.
H. L. Cannon	Instructor	Cincinnati, Ohio.
Mrs. E. E. Olcott	Instructor	Danville.
J. G. Chambers	Instructor (Music)	Lexington, Ky.
Shelby	Shelbyville	September 8-12.
J. W. Barlow	County Superintendent	Shelbyville.
R. J. Aley	Instructor	Bloomington.
J. H. Tomlin	Instructor	Shelbyville.
J. D. Forrest	Instructor	Irvington.
John A. Hill	Instructor	Portland.
Spencer	Rockport	September 8-12.
A. C. Huff	County Superintendent	Rockport.
L. J. Rettger	Instructor	Terre Haute.
Miss Parr	Instructor	Terre Haute.
Mrs. E. E. Olcott	Instructor	Danville.
Starke	Knox	August 25-29.
Geo. E. Butcher	County Superintendent	Knox.
D. M. Geeting	Instructor	Greensburg.
Delos Fall	Instructor	Lansing, Mich.
Geo. J. Newpert	Instructor	North Judson.
St. Joseph	South Bend	August 25-29.
William Clem	County Superintendent	South Bend.
Sanford Bell	Instructor	Worcester, Mass.
C. M. Curry	Instructor	Terre Haute.
B. C. Welgamood	Instructor (Music)	Tiffin, Ohio.
Steuben	Angola	September 1-5.
Homer Dilworth	County Superintendent	Angola.
Horace Ellis	Instructor	Franklin.
Miss Georgia Alexander	Instructor	Indianapolis.
J. F. Kinsey	Instructor (Music)	Chicago, Ill.

Sullivan	Sullivan	August 25-29.
Richard Park	County Superintendent	Sullivan.
James L. Hughes	Instructor	Toronto, Canada.
J. M. Greenwood	Instructor	Kansas City, Mo.
Switzerland	Vevay	September 1-5.
D. N. Haydon	County Superintendent	Vevay.
W. H. Fertich	Instructor	Brazil.
Augustus Hatten	Instructor	Chicago, Ill.
Tippecanoe	Lafayette	December 15-20.
E. C. Crider	County Superintendent	Lafayette.
John L. Lowes	Instructor	Hanover.
Sherman L. Davis	Instructor	Bloomington.
Tipton	Tipton	September 1-5.
L. D. Summers	County Superintendent	Tipton.
L. J. Rettger	Instructor	Terre Haute.
Jessie L. Newlin	Instructor	Chicago, Ill.
R. V. Black	Instructor (Music)	Coulterville, Ill.
Union	Liberty	August 18-22.
C. W. Osborne	County Superintendent	College Corner, Ohio.
T. G. Alford	Instructor	Lafayette.
J. A. Miller	Instructor	Bloomington.
Vanderburgh	Evansville	November 24-29.
James F. Ensle	County Superintendent	Evansville.
Vermillion	Newport	August 11-15.
E. E. Helt	County Superintendent	Newport.
W. W. Black	Instructor	Normal, Ill.
L. J. Rettger	Instructor	Terre Haute.
J. F. Kinsey	Instructor	Chicago, Ill.
Vigo	Terre Haute	September 1-5.
Chas. F. Grosjean	County Superintendent	Terre Haute.
Robert J. Aley	Instructor	Bloomington.
Wabash	Wabash	October 6-10.
John W. Lewis	County Superintendent	Wabash.
Nathan C. Schaeffer	Instructor	Harrisburg, Pa.
Sherman L. Davis	Instructor	Bloomington.
Adelaide S. Baylor	Instructor	Wabash.
J. F. Kinsey	Instructor (Music)	Chicago, Ill.
Warren	Williamsport	September 1-5.
Wm. J. Bader	County Superintendent	Williamsport.
Sherman L. Davis	Instructor	Bloomington.
W. W. Pfrimmer	Instructor	Kentland.
Warrick	Boonville	August 18-22.
James R. Wilson	County Superintendent	Boonville.
R. G. Boone	Instructor	Cincinnati, Ohio.
Mrs. Emma Mont McRae	Instructor	Lafayette.
Miss Lelia Parr	Instructor	Terre Haute.

Washington	Salem	August 18-22.
Joseph C. Bush	County Superintendent	Salem.
Earl Barns	Instructor	Philadelphia, Pa.
Grace Prow	Instructor	Salem.
Wayne	Richmond	September 1-5.
W. E. Wineburg	County Superintendent	Richmond.
Earl Barnes	Instructor	Philadelphia, Pa.
T. A. Mott	Instructor	Richmond.
Will Earhart	Instructor	Richmond.
Wells	Bluffton	August 11-15.
Robert W. Stine	County Superintendent	Bluffton.
Reuben P. Halleck	Instructor	Louisville, Ky.
Nannie C. Love	Instructor (Music)	Muncie.
White	Monticello	September 1-5.
T. S. Thornburg	County Superintendent	Monticello.
D. W. Dennis	Instructor	Richmond.
A. J. Kinnaman	Instructor	Worcester, Mass.
A. W. Conner	Instructor	Indianaplis.
Whitley	Columbia City	October 20-24.
Geo. H. Tapy	County Superintendent	Columbia City.
W. W. Parsons	Instructor	Terre Haute.
J. H. Tomlin	Instructor	Shelbyville.
J. F. Kinsey	Instructor (Music)	Chicago, Ill.

COUNTY INSTITUTES FOR 1901.

STATISTICAL SUMMARY.

Number males enrolled in State (three counties omitted on account of no report)	7,621
Number of females enrolled in State (three counties omitted on account of no report)	8,899
Total number enrolled in State (one county omitted on account of no report)	17,025
Average attendance in State (two counties omitted on account of no report)	15,597.6
Average attendance in county	173.3
Length of session in days for entire State (one county omitted on account of no report	457
Average length of session in days for each county	5
Amount of money drawn from county treasury for support of county institute (one county omitted on account of no report)	$8,462 40
Average amount of money drawn per county	93 00
Total cost of county institutes for entire State (one county omitted on account of no report)	21,459 53
Average cost of county institute per county	235 92

COUNTY INSTITUTES, 1901.

Number.	COUNTIES.	Enrollment.			Average attendance.	Length of session in days.	Amount of money drawn from the County Treasury for support of Institute.	Total cost of Institute.
		Males.	Females.	Total.				
1	Adams	108	77	185	178	5	$100 00	$280 00
2	Allen (No report)							
3	Bartholomew	107	109	216	192	5	100 00	246 50
4	Benton	41	82	123	118	5	100 00	222 10
5	Blackford	47	50	97	96	5	100 00	254 25
6	Boone	103	102	205	197	5	100 00	229 20
7	Brown	70	40	110	95	5	100 00	120 00
8	Carroll	97	96	193	190	5	100 00	312 00
9	Cass	100	150	250	225	5	100 00	250 00
10	Clark	100	135	235	230	5	100 00	300 00
11	Clay	109	111	220	207	5	100 00	155 75
12	Clinton	130	104	234	190	5	100 00	261 59
13	Crawford	90	55	145	132.8	5	100 00	201 00
14	Daviess	154	144	298	240	5	100 00	346 85
15	Dearborn	72	83	155	147	5	100 00	142 20
16	Decatur	58	97	155	151	5	100 00	182 40
17	Dekalb	90	84	174	155	5	50 00	288 00
18	Delaware	120	145	265	250	5	100 00	350 53
19	Dubois	82	79	161	250	5	100 00	194 45
20	Elkhart	212	324	536	463	5	100 00	268 70
21	Fayette	44	46	90	88	5	100 00	173 75
22	Floyd	78	98	176	150.6	5	100 00	205 25
23	Fountain	72	70	142	131	5	50 00	125 00
24	Franklin	50	64	114	112	5	100 00	209 09
25	Fulton	70	65	135	130	5	100 00	275 00
26	Gibson	101	92	196	175	5	100 00	235 00
27	Grant	*	*	360	240	5	100 00	350 00
28	Greene	90	110	200	200	5	100 00	235 00
29	Hamilton	110	104	214	204	5	100 00	250 00
30	Hancock	105	82	187	175	5	100 00	227 97
31	Harrison	128	92	220	200	5	100 00	240 00
32	Hendricks	82	121	203	186	5	100 00	238 00
33	Henry	76	91	167	162	5	100 00	212 60
34	Howard	90	89	179	168.2	5	100 00	280 00
35	Huntington	120	101	221	215	5	100 00	275 00
36	Jackson	90	112	202	191.6	6	100 00	233 23
37	Jasper	43	113	156	151	5	100 00	256 00
38	Jay	105	77	182	200	5	100 00	280 00
39	Jefferson	89	177	266	180	5	100 00	182 15
40	Jennings	58	71	129	121.6	5	50 00	177 93
41	Johnson	70	90	160	125	5	100 00	210 00
42	Knox	84	106	190	178	5	100 00	225 00
43	Kosciusko	101	127	228	224	5	100 00	263 72
44	Lagrange	71	85	156	145	5	100 00	209 09
45	Lake	50	170	220	214	5	100 00	201 80
46	Laporte	33	150	183	161	5	100 00	271 25
47	Lawrence	70	90	160	155	5	50 00	275 00
48	Madison	180	120	300	250	5	50 00	560 00
49	Marion	76	127	203	186	5	100 00	250 00
50	Marshall	100	111	211	204	5	100 00	192 75
51	Martin	*	*	145	*	5	50 00	228 67
52	Miami	100	120	220	220	5	100 00	320 00

* No report.

COUNTY INSTITUTES, 1901—Continued.

Number.	COUNTIES.	Enrollment.			Average attendance.	Length of session in days.	Amount of money drawn from the County Treasury for support of Institute.	Total cost of Institute.
		Males.	Females.	Total.				
53	Monroe	81	62	143	140	5	$100 00	$241 00
54	Montgomery	105	118	223	212	5	100 00	268 00
55	Morgan	88	106	194	185	5	100 00	223 60
56	Newton	40	65	105	90	5	100 00	200 00
57	Noble	71	95	166	160	5	100 00	185 15
58	Ohio	25	27	52	45	5	50 00	86 39
59	Orange	64	67	131	125	5	100 00	221 00
60	Owen	73	55	128	123	5	100 00	278 60
61	Parke	80	91	171	166	5	100 00	205 85
62	Perry	79	57	136	128	5	100 00	190 68
63	Pike	114	31	145	144	5	100 00	205 00
64	Porter	43	102	145	142	5	100 00	236 40
65	Posey	78	70	148	148	5	100 00	246 00
66	Pulaski	59	141	200	158	5	100 00	276 32
67	Putnam	100	125	225	200	5	100 00	185 00
68	Randolph	102	101	203	194	5	100 00	323 42
69	Ripley	78	74	152	147.3	5	100 00	211 96
70	Rush	60	73	133	128.2	5	100 00	174 50
71	Scott	51	41	92	76	5	62 40	109 65
72	Shelby	160	142	302	286	5	100 00	250 00
73	Spencer	73	82	155	150	5	50 00	220 00
74	Starke	41	49	90	89	5	100 00	195 00
75	St. Joseph	98	204	302	225	5	100 00	265 00
76	Steuben	38	112	150	142	5	100 00	183 00
77	Sullivan	110	137	247	235	5	100 00	275 00
78	Switzerland	80	58	138	110	5	50 00	145 70
79	Tippecanoe	100	218	318	300	5	100 00	290 00
80	Tipton	101	45	146	135	5	100 00	207 97
81	Union	22	38	60	55.3	5	50 00	183 40
82	Vanderburgh	29	53	82	81	5	50 00	267 50
83	Vermillion	59	55	114	109	5	100 00	200 00
84	Vigo	173	307	480	425	5	100 00	215 00
85	Wabash	76	151	227	227	5	100 00	350 00
86	Warren	50	81	131	125	5	100 00	180 00
87	Warrick	125	64	189	152	5	100 00	201 00
88	Washington	162	66	228	200	6	100 00	322 50
89	Wayne	50	165	215	215	5	100 00	318 00
90	Wells	101	60	161	156	5	50 00	183 64
91	White	92	93	185	181	5	100 00	209 53
92	Whitley	61	80	141	138	5	100 00	325 00
	Total	7,621	8,899	17,025	173.3	457	$8,462 40	$21,469 53

(h) TOWNSHIP INSTITUTES.

Local school officers and teachers give increasing attention to Township Institutes. These are the most valuable meetings held in Indiana in the name of education. The assembling of all of the teachers of a township at least once each month during the school term to discuss matters of educational concern is of great value to the State. It is a great institution for the regeneration and education of the rural teaching corps.

STATISTICAL.

Township institutes held during year ending July 31, 1902.....	6,421
Average number held in each township.....	6.3
Cost in wages to teachers for year.....	$149,602.20

THE TOWNSHIP INSTITUTE LAW.

[1889, p. 67. Approved and in force March 2, 1889.]

Township Institutes. 9. At least one Saturday in each month during which the public schools may be in progress shall be devoted to Township Institutes, or model schools for the improvement of teachers; and two Saturdays may be appropriated, at the discretion of the Township Trustee of any township. Such Institute shall be presided over by a teacher, or other person, designated by the Trustee of the township. The Township Trustee shall specify, in a written contract with each teacher, that such teacher shall attend the full session of each Institute contemplated herein, or forfeit one day's wages for every day's absence therefrom, unless such absence shall be occasioned by sickness, or such other reason as may be approved by the Township Trustee, and for each day's attendance at such Institute each teacher shall receive the same wages as for one day's teaching: Provided, That no teacher shall receive such wages unless he or she shall attend the full session of such Institute and perform the duty or duties assigned. (R. S. 1894, §6009; R. S. 1897, §6230.)

1. A Trustee failing to comply with the above is subject to prosecution and removal from office.

3. Examinations.

(a) LIFE STATE FOR GRADUATES.

The various licenses issued in the State and counties are as follows:

(1) Life State for graduates of higher institutions. Issued by the State Board of Education.

(2) Life State for graduates and non-graduates. Issued by the State Board of Education.

(3) State Professional, for a period of eight years. Issued by the State Board of Education.

(4) State Sixty Months' License. Issued by the State Superintendent of Public Instruction.

(5) State High School License (one, two, or three, years). Issued by the State Superintendent of Public Instruction.

(6) State Primary License (one, two, or three, years). Issued by the State Superintendent of Public Instruction.

(7) State Thirty-six Months' License. Issued by the State Superintendent of Public Instruction.

(8) State Twenty-four Months' License. Issued by the State Superintendent of Public Instruction.

(9) State Twelve Months' License. Issued by the State Superintendent of Public Instruction.

(10) County High School License. Issued by the County Superintendent.

(11) County Primary License. Issued by the County Superintendent.

(12) County Thirty-six Months' License. Issued by the County Superintendent.

(13) County Twenty-four Months' License. Issued by the County Superintendent.

(14) County Twelve Months' License. Issued by the County Superintendent.

(15) County Six Months' License. Issued by the County Superintendent.

The following rules govern the examination of teachers for Life State and Professional Licenses:

For Graduates of Higher Institutions of Learning Only.—The State Board of Education revised its rules governing applicants for Life State Licenses by the addition of the following resolutions:

Resolved, That the rules of the State Board of Education relating to examinations for and granting of, Life State Licenses shall be and are hereby amended by the addition of the following: All graduates of higher institutions of learning in Indiana, or other institutions of equal rank in other states approved by this Board, which require graduation from commissioned high schools, or the equivalent of the same, as a condition of entrance, which maintain standard courses of study of at least four years, and whose work, as to scope and quality, is approved by the State Board of Education, shall, on complying with the conditions enumerated below, be entitled to Life State Licenses to teach in Indiana: Provided, however, That graduation by the applicant shall have been accomplished by not less than three years' resident study and by thorough, extended examinations in all subjects pursued privately and for which credit has been given by the institution: And, provided further, That the requirement as to three years' resident study shall apply only to applicants graduating after this date, January 18, 1900.

First. Such applicants must have held one or more sixty months' licenses, or a Professional License.

Second. They must present to the State Board of Education satisfactory written testimonials from competent superintendents, special supervisors, teachers, or other school officials to the effect that they have taught and managed a school or schools successfully for a period of not less than thirty months, at least ten of which shall have been in Indiana.

Third. They must pass thorough, satisfactory examinations in any three of the following subjects: (1) General History of Education; (2) The School System and the School Law of Indiana; (3) Educational Psychology; (4) Experimental Psychology and Child Study; (5) Leading School Systems of Europe and America; (6) Science of Education, and (7) The Principles and Methods of Instruction.

Fourth. Before entering upon the examination, such applicant shall present to the State Board of Education satisfactory evidence of good moral character, and shall pay five dollars each (the fee prescribed by law), which can in no case be refunded. Examinations in the subjects named above may be taken in April.

Fifth. A license will be granted to those who make a general average of 75 per cent., not falling below 65 per cent. in any subject.

(b) PROFESSIONAL, OR EIGHT YEAR STATE CERTIFICATES.

And provided, That any person now possessing a thirty-six months' license, whose next consecutive license shall be for a term of thirty-six months, or any person who shall hereafter receive two licenses in succession each for thirty-six months, may receive at the expiration of such several licenses, a license for the term of eight years upon such an examination held by the County Superintendent as may be prescribed by the State Board of Education, and such license shall issue only upon the approval of the State Board of Education, and shall be styled a professional license, and shall entitle the holder to teach in any of the schools of this State.

Subjects for April: Geometry, rhetoric, general history, English literature, physical geography, and two of the following three subjects: Chemistry, geology and zoölogy. If the applicant pass on both the March and April lists a life certificate is issued. The April examination is conducted by the members of the State Board of Education.

(c) LIFE STATE CERTIFICATES.

[1865, p. 3. Approved and in force March 6, 1865.]

24. State Certificates. 155. Said Board may grant State certificates of qualification to such teachers as may, upon a thorough and critical examination, be found to possess eminent scholarship and professional ability, and shall furnish satisfactory evidence of good moral character. They shall hold stated meetings, at which they shall examine all applicants, and those found to possess the qualifications herein above named shall receive such certificate, signed by the President of the Board, and impressed with the seal thereof; and the said certificate shall entitle the holder to teach in any of the schools of the State without further examination, and shall also be valid during the lifetime of said holder, unless revoked by said Board. Each applicant for examination shall, on making application, pay to the Treasurer of the Board five dollars as a fee. (R. S. 1881, Sec. 4422; R. S. 1894, Sec. 5851; R. S. 1897, Sec. 6114.)

LIFE STATE AND PROFESSIONAL.

Examinations for these licenses will be conducted in the months of March and April.

Section 1. Subjects for March: Algebra, Civil Government, American Literature, Science of Education, and two of the following three subjects—Elements of Physics, Elements of Botany, and Latin (Latin Grammar, two books of Caesar and two of Virgil). A satisfactory examination on the above entitles the applicant to a Professional License, valid in any Indiana school for eight years.

Sec. 2. Subjects for April: Geometry, Rhetoric, General History, English Literature, Physical Geography, and two of the following three subjects—Chemistry, Geology, and Zoölogy. A satisfactory examination on both 1 and 2 entitles the applicant to a Life State License.

The following requirements govern the application for Life State and Professional Licenses:

1. Applicants for Life State and Professional Licenses must have held two thirty-six months' licenses in Indiana, or an equivalent in another State, obtained by actual examination, and must have taught successfully at least forty-eight months, which fact shall be properly certified to and sent with the manuscripts to the State Board of Education.

Before entering upon the examination, applicants shall present to the examiner satisfactory evidence of good moral character and professional ability. Applicants for Life State License shall pay five dollars each (the fee prescribed by law), which can, in no case, be refunded.

2. Applicants for Professional License will take the March examination only.

3. No fee is required of applicants for Professional License.

4. A license will be granted to those who make a general average of seventy-five per cent., not falling below sixty per cent. in any subject, and who present satisfactory evidence of professional ability and good moral character.

5. An applicant for a Life State License who shall fail in the examination for the same, but who has met all the requirements of a Professional License, shall receive such license, or if he reach the required average for a Professional License, but fall below the standard per cent. in one subject, he may be conditioned in such subject, and may be granted a Professional License, on the same conditions as if he had originally applied for a license of this class.

6. An applicant is "conditioned," that is, he may complete the work at the next regular examination, if he make the required general average and pass successfully upon all branches except one, required for the license applied for. A statement setting forth this fact will be furnished such "conditioned" applicant, who must present the same to the County Superintendent, who will forward it with the manuscript to this Department.

(d) SAMPLE QUESTIONS.

1902—STATE OF INDIANA—EXAMINATION FOR TEACHERS' STATE CERTIFICATES—FOR GRADUATES OF HIGHER INSTITUTIONS OF LEARNING ONLY.

Questions to be used on the last Saturday in April.

Special notice to applicants.—The following rules govern the examination of teachers for Life State Licenses:

1. For Graduates of Higher Institutions of Learning Only.—The State Board of Education revised its rules governing applicants for Life State Licenses by the addition of the following resolutions:

Resolved, That the rules of the State Board of Education relating to examinations for and the granting of Life State Licenses shall be and are hereby amended by the addition of the following: All graduates of higher institutions of learning in Indiana, or other institutions of equal rank in other States approved by this Board, which require graduation from commissioned high schools, or the equivalent of the same, as a condition of entrance, which maintain standard courses of study of at least four years, and whose work, as to scope and quality, is approved by the State Board of Education, shall, on complying with the conditions enumerated below, be entitled to Life State Licenses to teach in Indiana: Provided, however, That graduation by the applicant shall have been accomplished by not less than three years' resident study and by thorough, extended examinations in all subjects pursued privately and for which credit has been given by the institution: And, provided further, That the requirements as to three years' resident study shall apply only to applicants graduating after this date, January 18, 1900.

First. Such applicants must have held one or more sixty months' or professional licenses.

Second. They must present to the State Board of Education satisfactory written testimonials from competent superintendents, special supervisors, teachers, or other school officials to the effect that they have taught and managed a school or schools successfully for a period of not less than thirty months, at least ten of which shall have been in Indiana.

Third. They must pass thorough, satisfactory examinations in any three of the following subjects: (1) General History of Education; (2) The School System and the School Law of Indiana; (3) Educational Psychology; (4) Experimental Psychology and Child Study; (5) Leading School Systems of Europe and America; (6) Science of Education, and (7) The Principles and Methods of Instruction.

Fourth. Before entering upon the examination, such applicants shall present to the State Board of Education satisfactory evidence of good moral character, and shall pay five dollars each (the fee prescribed by law), which can in no case be refunded.

Fifth. A license will be granted to those who make a general average of 75 per cent., not falling below 65 per cent. in any subject.

In view of the fact that the manuscripts of applicants for both Life State and Professional Licenses are sent to the several members of the State Board of Education for gradation, it is essential that applicants for such licenses observe the following rules:

1. Write on one side of the paper only, using legal cap.
2. See that the answers to the questions in each branch are entirely separate from those of any other branch, and securely fastened together.
3. Write full name and postoffice address upon each set of answers.
4. Furnish the member of the State Board of Education conducting the examination copies of recommendations, as they are to be filed for future reference, and can not be returned.
5. The expense of sending manuscripts should be furnished by the applicant.
6. A fee of five dollars should be collected from all applicants for this license.

HISTORY OF EDUCATION.

(Any eight, but no more.)

1. What was Plato's scheme of education?
2. Give a summary of Quintilian's pedagogical teachings.
3. What were the Trivium and Quadrivium of the monastic schools?
4. What was the scholasticism of the Middle Ages?
5. Describe Feudal Education.
6. What effect had the Protestant Reformation upon education in Germany?
7. What were the especial characteristics of Jesuit education? How did it differ from the Jansenist?
8. What did Bacon give to education? Give your estimate of the educational value of his work.
9. Describe the Herbartian Pedagogy.
10. Give a short description of the French school system. In what particular does it excel all others?

SCIENCE OF EDUCATION.

(Any eight, but no more.)

1. How will a knowledge of the History of Education aid the teacher in his professional duties?
2. To what extent, and in what respect is the teacher responsible for the physical condition of the student?
3. Give the central idea, or ideas, which would dominate you in preparing a course of study.
4. Name five great leaders of American educational thought of today, and indicate the lines of their investigations.
5. What are the arguments for and against departmental work in the grades? On the whole, which course would you prefer?
6. In dealing with children's emotions what pedagogical procedure is advisable?
7. What is meant by the statement that "The prolongation of infancy is the cause of civilization"? How would you apply this principle?
8. What do you consider a healthy mental habit?
9. How does the ethical consideration stand related to the aim of education? What are the chief means of inculcating ethical principles in school work?
10. Discuss the question of fatigue in its bearings upon the practical work of the school.

LEADING SCHOOL SYSTEMS OF EUROPE AND AMERICA.

(Any eight, but no more.)

1. In what respects do the board and voluntary schools of England differ?
2. What was the influence of Thomas Huxley upon education in England?
3. Discuss briefly the so-called large public schools in England.
4. What are the influences which make German schools of a high order?
5. "In twenty years Germany has attained an industrial development on a par with that of England in practically every line of manufacturing and in many lines surpassing it."
   What is the relation of the educational system of Germany to the rapid industrial advance of that country?
6. Contrast education in relation to agriculture, in Europe and in the United States.
7. What important modifications have taken place in the curricula of American city schools during the past twenty-five years?
8. What is the trend of the best educational thought relative to the education of the negro in the United States?
9. What is the general tendency of the present time, relative to school administration in American cities?
10. President Eliot, in speaking of higher education in France, says: "The French program is decidedly more substantial, that is to say, it calls for greater exertion on the part of the pupil than the American, introduces the children earlier to serious subjects, and is generally more interesting and stimulating to the intelligence."
    Briefly discuss the foregoing.

SCHOOL SYSTEM AND SCHOOL LAW OF INDIANA.

(Any eight, but no more.)

1. On one page give the important provisions of Indiana's text-book law. Who adopts the books? What are the prices fixed by law to be paid by the pupils for the books?
2. What school laws were enacted by the General Assembly of 1901?
3. In what counties of the State has the plan of centralizing schools been operated? With what effect?
4. What are the sources of the tuition fund, distributed to the counties by the State semiannually? Upon what basis is this fund apportioned?
5. How are funds commonly raised in cities and towns to pay for the erection of schoolhouses? Is there a limit to the amount that may be raised thus? If so, what?
6. What are the sources of membership on the State Board of Education? What are its duties?
7. For what causes may a teacher's license be revoked? What is the procedure in cases of revocation?
8. When may schools be abandoned?
9. In what ways does the principal of the common school fund become augmented?
10. How is the County Board of Education constituted? What are its powers?

EDUCATIONAL PSYCHOLOGY.

(Any eight, but no more.)

1. Noble impulses aroused but not incarnated in act, soon die; what hint is there here as to the effect of the constant reading of highly impassioned fiction?
2. The will is influenced but not determined by motive; what use can be made of this principle in school discipline?
3. The intellect does its best work when accompanied by pleasing memories and emotions; how can this principle be applied in the schoolroom?
4. What hint may the teacher get from the psychological principle that a given purpose is best dislodged by the substitution of another?
5. What practical use can the teacher make of "expectant attention?"
6. What is the educational value of the principle that "Memory is in the ratio of mastery?"
7. Give the pedagogical application and value of the law that "ideals cherished, become motives."
8. Does the order of development of the soul's powers justify or condemn the ordinary curricula of studies of the common school, the high school and the college?
9. Discuss the relative value of punishment and reward as motives for the schoolroom.
10. Develop the thought that "the nature of the soul is the key to its culture."

EXPERIMENTAL PSYCHOLOGY.

(Any eight, but no more.)

1. (a) Name five leading experimental psychologists. (b) Of what value is experiment in the study of mental activity?
2. (a) What is a complementary color? (b) A negative after-image? Illustrate each. (c) State the Young-Helmholtz Theory of color-vision.
3. (a) What is astigmatism, and how detected? (b) Explain myopia and methods of detection. (c) Discuss the influence of excessive astigmatism and myopia on the school-work of children.
4. (a) Name the kinds of sensations whose end organs are in the skin. (b) What part of the ear mediates sensations of tone? (c) State Helmholtz's theory of the function of this organ. (d) How test defective hearing?
5. (a) How do we judge of the distance of objects? (b) Of solidity? (c) Of what scientific value is the study of optical illusions?
6. (a) What is meant by "memory types?" (b) What are the characteristics and advantagaes of the "visual type?" (c) Of the "verbal type?" (d) Describe method for detection of these types in children.
7. (a) What is meant by "memory span?" How tested? (b) State results of some experiments on children.
8. (a) What is a simple reaction; a compound reaction? How measured? (b) Of what value are such methods in the study of mental capacity?
9. (a) Describe some of the methods used in testing mental fatigue. (b) Of what pedagogical value are such tests made in the schools? State some of the most important conclusions already reached by investigators.
10. Discuss some study in experimental psychology which you have read, giving methods and results.

PRINCIPLES AND METHODS OF INSTRUCTION.

(Any eight, but no more.)

1. What is meant by a principle? Illustrate.
2. Give what you consider to be the most comprehensive principle of instruction.
3. Show a subordinate principle under this comprehensive principle.
4. What are the two main sources of principles of instruction? Why?
5. Give one principle from each of these sources and explain its function in teaching.
6. What is meant by the term Method?
7. What relation do principles have to Method?
8. Illustrate the answer to the seventh question by giving a list of the principles involved in Method in History.
9. How does a device differ from a method? Illustrate by stating the main devices in teaching in History.
10. Show how the study of Psychology contributes to a knowledge of principles and methods.

Notice.—The State Board of Education, at its meeting March 22, 1895, resolved that it reserve the right to call before it any applicant for Life State or Professional License for oral examination in addition to the written examination based upon the questions herewith submitted.

For the State Board of Education:

FRANK L. JONES,
State Superintendent Public Instruction, President.

W. W. PARSONS,
President State Normal School, Secretary.

Notes to the Examiner. 1. The State Board of Education reserves the right to call before it any applicant for oral examination, in addition to the written examination based upon the questions submitted for Life State and Professional Licenses (p. 429, record). 2. Please send manuscripts in on Monday following the examination.

1902—STATE OF INDIANA—EXAMINATION FOR TEACHERS' STATE CERTIFICATES. (SAMPLE QUESTIONS.)

DIVISION 1 ENTITLES TO PROFESSIONAL LICENSE.

Questions to be used on the last Saturday in March.

RULES.

1. Each applicant for a State Certificate shall, at the opening of the examination, pay to the County Superintendent the sum of five dollars, the fee prescribed by law, which can in no case be refunded. Applicants for a "professional" license are not required to pay a fee.

2. Applicants shall provide themselves with legal cap paper and pens and ink, and shall write all their work in ink.

3. Each applicant will be furnished with a printed list of questions in each subject at the hour designated. He shall number his answers to correspond with the questions, but need not copy the latter. The pages upon each subject should be fastened together, and across the top of the first page should be written at the left the subject, in the middle the applicant's name, at the right the county. Manuscripts must not be folded or rolled.

4. No books shall be consulted nor communication permitted during the examination. No one shall be permitted to make inquiries respecting the import of any question. If any one shall be in doubt as to the meaning of a question he shall express his doubt in writing, and this statement shall be submitted to the Board with his examination papers.

5. If corrections are necessary they shall be made by drawing a single line over the amended error, that the error as well as the correction may be seen. No slate or trial papers shall be used, but all the writing shall be upon the sheets of the examination papers.

6. Any violation of these rules shall be reported by the Superintendent to the State Board.

7. The County Superintendent will collect and carefully count the manuscripts to see that none are missing, and will send them immediately to the State Superintendent, by mail or express, at the expense of the applicants.

CIVIL GOVERNMENT.

(Any eight.)

1. In case of death or resignation of the president of the United States does the vice-president become president or do the duties of the office of president fall upon the vice-president? Discuss.
2. What are the war taxes? State how these taxes are collected and how the law operates.
3. Why were so many amendments to the U. S. constitution made soon after its adoption? Be explicit.
4. Enumerate some of the provisions of the U. S. constitution which have not operated as they were intended.
5. What is meant by reciprocity? Income tax? Free trade? Protective tariff?
6. What is meant by the long session of Congress? The short session?
7. What are some of the powers prohibited in the constitution to the U. S. government?
8. State briefly how treaties are made and what branches of our national government are concerned in their making?
9. According to the constitution what constitutes treason?
10. How may amendments to the U. S. constitution be proposed? How adopted?

ALGEBRA.

(Any eight. Show work.)

1. (1) If $a=3$, $b=2$, $c=o$, and $d=1$, evaluate $\frac{3b^2+2a-6d}{4b-ac-bd}$

   (2) Simplify: $(x+y)^2-(x+y)(x-y)-\left[x(2y-x)-y(2x-y)\right]$
2. (1) Prove $K^m)(K^n)=K^{m+n}$. Be general.
   (2) Prove $(-K)(-E)=+EK$. Be general.
3. (1) A purse contains 30 coins, which amount to \$136.50. A certain number of these are dimes, one-fifth of that number are half-eagles, and the remainder eagles. Find the number of each.
   (2) Given $9x-1)=27$. Is this equation conditional or identical? Why? Is it a linear equation? Why?
4. If $f(x)=x^2-3x+1$, find $f(a)$; find $f(-1)$; find $f(o)$; find value of $\frac{f(-1)+f(+)}{F(+3)}$
5. Factor: (1) x^3-3x^2+x-3; (2) $a^2-3b^2-c^2-2ab+4bc$. Show, without division, that $(3x^2-2x+1)^3-(2x^2+3x-5)^3$ is divisible by x^2-5x+6.
6. (1) Simplify: $\dfrac{a+\dfrac{ab+1}{b}}{\dfrac{+1}{\dfrac{bc+1}{c}}}-\dfrac{1}{b(abc+a+c)}$

   (2) If $\frac{a}{c}=\frac{b}{d}$ show that $\frac{a^2-b^2}{a^2+b^2}=\frac{c^2-d^2}{c^2+d^2}$
7. (1) Find x and y: $25/x+24/y=1$ (1); $20(2/x+3/y=7$. (2) What is the purpose of elimination? What axioms underlie transposition?

8. Find product of $\sqrt[3]{3/2}$ $\sqrt[2]{2/3}$, and rationalize the denominator of the result. Prove m=1.

9. (1) Find x: $2\sqrt{x}-\sqrt{4x-3}=\frac{1}{\sqrt{4x-3}}$ (2) $\sqrt{-Kx}\sqrt{-K}=-K$ and $\sqrt{-Kx}\sqrt{-K}=K$. Therefore $-K=K$. Discuss.

10. A boy was sent out for 40 cents worth of eggs. He broke 4 on his way home, and the cost therefore was at the rate of 3 cents more than the market price for 6 eggs. How many did he buy?

BOTANY.

(Any eight.)

1. (a) Describe the primitive plant cell.
   (b) Draw diagram, indicating by letters, features included in answer to (a).
2. (a) What is Karyokenesis?
   (b) What is its probable significance?
3. (a) Give common characters of Thallophytes.
   (b) How are Algae and Fungi distinguished?
4. (a) What is meant by plant Ecology?
   (b) What are the principal Ecological factors influencing plants?
5. (a) What are the common characters of the foliage leaf?
   (b) What are the functions of the foliage leaf?
6. (a) What is meant by the term "Alternation of Generations?"
   (b) Give different phases in case of ferns.
7. (a) What are the principal plant foods?
   (b) From what sources are they derived?
8. What are the physical and chemical phenomena connected with germination?
9. (a) Explain at least three protective devices in plants.
   (b) Explain at least three methods of seed dissemination.
10. (a) Name ten forest trees native to Indiana.
    (b) Name ten noxious weeds of the State.
    (c) Name the more notable poisonous plants native to the State.

PHYSICS.

(Any eight.)

1. Make a diagram and fully explain how a boat may sail into the wind.
2. Explain at length why "perpetual motion" is impossible.
3. When pieces of wood, lead, iron, and glass are in a room of uniform temperature, why do they seem to the touch to have different temperatures?
4. Explain why liquids are not as good conductors of heat as solids.
5. Explain the principles involved in the manufacture of ice.
6. What is the "critical angle"—as of glass?
7. Explain the construction and use of the kathode or X-ray instrument.
8. Explain in full (using diagram) the construction and operation of the meter used for measuring the amount of electricity used, as in a dwelling.

9. Give the difference in construction of the Daniel and Laclanche battery cell.
10. Describe the apparatus for converting electricity into heat.

AMERICAN LITERATURE.

(Any eight, but no more.)

1. (a) Discuss the characteristics of the early Puritan literature in America.
   (b) Account for these characteristics.
2. "When the hour of the Revolution struck, it was the South that gave to the crisis the commander-in-chief, the most eloquent orator, the framer of the Declaration of Independence, the father of the Constitution, and the first President of the United States."
   State fully what influences in each case made this possible.
3. (a) Colonial Period, 1600-1750. Name a poet, a historian, and a theologian.
   (b) Revolutionary Period, 1750-1800. Name a man of affairs, an orator, a statesman.
   (c) National Period, 1800-.... Name a noteworthy editor, a novelist of the realistic school, a critic and a short story writer.
4. Mention a poem and a story of Edgar Allen Poe.
   Analyze carefully their qualities of style.
5. Characterize briefly each of five authors that belonged to the "Concord Group."
6. (a) What parts of the South have furnished material to authors of the Southern school?
   (b) In each instance support your statement by naming an author and one of his books.
7. (a) What is the theme of one of Hawthorne's romances?
   (b) Trace its development.
8. Discuss the rise and development of American humor, naming, among others, writers who are doing creditable work today.
9. Classify the leading American periodical publications so as to show the distinctive work of each.
10. What is meant by plot? Dramatic climax? Denouement? Local color? Atmosphere.

LATIN.

(Answer the first three and any other five.)

1. Translate into idiomatic English: B. G. I. 21.

   Eodem die ab exploratoribus certior factus hostes sub monte consedisse milia passuum ab ipsius castris octo, qualis esset natura montis et qualis in circuitu ascensus, qui cognoscerent, misit. Renuntiatum est facilem esse. De tertia vigilia Titum Labienum, legatum pro praetore, cum duabus legionibus et iis ducibus, qui iter cognoverant, summum iugum montis ascendere iubet; quid sui consilii sit, ostendit.

2. Explain the syntactical use of the following words in the above: Die, milia, passuum, esset, cognoscerent, esse, legionibus, consilii.
3. Translate into Latin:

   Caesar refrained from battle for a little while on account of the enemy's high reputation for valor. In a few days, however, he found by skirmishes with the cavalry that his men were not inferior in courage. There was a hill that extended over so much space that it was by nature suitable for marshaling an army, and there he formed his line of battle.
4. Explain fully the gerund and gerundive and give examples illustrating one use of each.
5. Translate: Ver. Bk. I, lines 305-309.
   (1) At pius Aeneas, per noctem plurima volvens.
   (2) ut primum lux alma data est, exire locosque
   (3) explorare novos, quas vento accesserit oras,
   (4) qui teneant, nam inculta videt, hominesne feraene,
   (5) quaerere constituit, sociisque exacta referre.
6. Divide the first and second verses of the above into feet and mark all the vowels.
7. Explain briefly who (or what) were the following: (1) Priam, (2)Styx, (3) Ascanius, (4) Diana, (5) Cerberus.
8. Write Latin sentences illustrating:
   (1) The subjunctive of purpose.
   (2) The subjunctive of result.
   (3) The dative of possession.
   (4) The ablative of quality.
   (5) The accusative of duration of time.
9. Translate: B. G. III, 4.

   Brevi spatio interiecto, vix ut his rebus, quas constituissent, collocandis atque administrandis tempus daretur, hostes ex omnibus partibus signo dato decurrere, lapides gaesaque in vallum conicere.
10. Tell the syntactical use of the following words in the above:
   (1) spatio.
   (2) constituissent.
   (3) collocandis.
   (4) daretur.
   (5) conicere.

SCIENCE OF EDUCATION.

(Any eight, but no more.)

1. Briefly discuss the place of imitation in education.
2. Discuss the statement "Acquirement is made the all in all in some schools and education is left to take care of itself."
3. Briefly describe an ideal schoolroom as to lighting, ventilation, seating, heating, floor space, etc.
4. Give your view of the amount of home study which should be assigned for pupils ten, twelve and sixteen years of age, respectively.

5. What has been the effect of "Child Study" upon the American elementary schools?
6. "There has not been a greater change in the world than the change in home and school discipline from fear to love, from driving to leading."
   What influences, in school and out of school, have brought about this change?
7. Discuss the relation of the growth of urban population to educational conditions and courses.
8. It has been said that most of the philosophical foundation of education in the nineteenth century, and not a few of its methods, came from five men. Name them.
9. What is meant by the doctrine of formal discipline?
   Briefly discuss your view of the extent to which this doctrine should guide the work of the teacher.
10. "Soft pedagogics have taken the place of the steep and rocky path to learning."
    What statements, if any, can be made in support of the above proposition and what can be said to refute it?

GENERAL STATEMENT.

(On separate sheet.)

1. For what grade of license do you apply?
2. If applying for a Professional or Life State License, state the dates and general averages of your two thirty-six months' licenses.
3. How many months have you taught, and how many of these have been in Indiana?
4. Make this or an equivalent declaration: I solemnly declare that in the March division of the examination I have not given or received aid in any manner whatever, and will neither give nor receive aid in the remaining division thereof.
   [Sign with full name (not initials) and add postoffice address and date.]

For the State Board of Education:

FRANK L. JONES,
State Superintendent Public Instruction, President.

W. W. PARSONS,
President Indiana State Normal School, Secretary.

1902—STATE OF INDIANA—EXAMINATION FOR TEACHERS' STATE CERTIFICATES.

DIVISION 2.

Questions to be used on the last Saturday in April.

Note.—The following resolution was adopted by the State Board of Education, October 31, 1887:

Resolved, That the examination for Professional License include the following branches: Algebra, Civil Government, American Literature,

Science of Education, and two of the following three subjects: Elements of Physics, Elements of Botany or Latin (Latin Grammar, two books of Caesar, and two of Virgil); and

Further resolved, That the examination for State License shall include, in addition to those of Professional License: Geometry, Rhetoric, General History, English Literature, Physical Geography, and two of the following three subjects: Chemistry, Geology, Zoölogy.

Special Notice to Applicants.—In view of the fact that the manuscripts of applicants for both Life State and Professional Licenses are sent to the several members of the State Board of Education for gradation, it is essential that applicants for such licenses observe the following rules:

1. Write on one side of the paper only, using legal cap.
2. See that the answers to the questions in each branch are entirely separate from those of any other branch, and securely fastened together.
3. Write full name and postoffice address upon each set of answers.
4. Furnish your County Superintendent copies of recommendations, as they are to be filed for future reference, and can not be returned.
5. Necessary postage for sending manuscripts should be furnished the County Superintendent by the applicant.
6. A fee of five dollars should be collected from all applicants for this license.

PHYSICAL GEOGRAPHY.

(Any eight, but no more.)

1. How do different strata of outcropping rocks affect the topography of a region? Illustrate.
2. Embayed coastal plains: (a) Characteristics; (b) previous condition; (c) reason for present aspect; (d) relation to man's life; (e) example.
3. Give five probable causes for the glacial period, and discuss the most probable one.
4. (a) What determines the character of our weather from day to day? Explain. (b) What determines the intensity of the weather changes from day to day? Explain.
5. Draw a typical cyclone for this region and give prognostics.
6. Draw a typical country road system for a hilly country, showing the relation to drainage and marking the probable location of farm houses.
7. (a) Trace the development of a river valley from youth to old age. (b) Define a graded river.
8. How is man's life affected by (a) topography, (b) soil, (c) mineral deposits?
9. Account for the rich farming lands of North Dakota.
10. How do you account for the belted condition of certain coastal plains, southern New Jersey for example?

ZOOLOGY.

(Any eight, but no more.)

1. (a) What is the appearance of protoplasm under a slight magnification?
   (b) What are the vital characteristics of protoplasm?
2. (a) What is the meaning of the term tissue as applied to the animal body?
   (b) Name the principal tissues of the animal body.
3. (a) Name the sub-kingdoms of the animal kingdom.
   (b) Give characters of at least two of these sub-kingdoms.
4. (a) What factors determine the distribution of animal forms?
   (b) Based upon (a) what would be the natural life zones of North America?
5. What is the significance of color in animals? Illustrate points in answers by specific examples.
6. (a) What is meant by the term "metamorphosis" as applied to animals?
   (b) Give the various phases in the metamorphosis of insects.
7. (a) Give the vertebrate plan of structure.
   (b) Give the mammalian plan of structure.
8. In what forms of life is a highly specialized circulatory system not needed? Give reason for answer.
9. (a) What is meant by the term "differentiation?"
   (b) What is the significance of differentiation in determining rank in the animal scale?
10. Give the life history of some animal of your own selection.

CHEMISTRY.

(Any eight, but no more.)

1. How can the relative weights of magnesium and oxygen in magnesium oxide be found experimentally?
2. State fully the atomic theory. Upon what two laws was the theory originally based?
3. Describe two ways of preparing oxygen, naming all the products formed by the reactions.
4. Describe a method for obtaining the equivalent weight of zinc. Define equivalent weight.
5. How are the relative molecular weights of gaseous substances obtained? Upon what law is the method based?
6. Define oxidation, reduction, atom, molecule, and chemical compound.
7. What is the usual action of diluted nitric acid (H N O) on metals (Cu)? Why is not hydrogen one of the products?
8. How are the common impurities in natural waters removed? What is the cause of temporary and of permanent "hardness" in water?
9. Describe one of the two methods (the Le Blanc or the Solvay) of making sodium carbonate.

10. How many grains of chlorine can be made from two hundred grains of manganese dioxide when this is treated with concentrated hydrochloric acid? What will be the volume of the chlorine under standard conditions? Mn 55, O 16, Cl 35.4.

GEOMETRY.

(Any eight, but no more.)

1. If one edge of a cube is a, what is the height h of an equivalent right circular cylinder whose diameter is b?
2. The sum of the sides of a spherical polygon is less than 360 degrees. Prove.
3. Outline the geometric method by which π can be found.
4. If the middle points of two adjacent sides of a parallelogram are joined, a triangle is formed which is equivalent to one-eighth of the entire parallelogram. Prove.
5. The areas of two similar triangles are to each other as the squares of any two homologous sides. Prove.
6. If three circles intersect each other, the common chords are concurrent. Prove.
7. The bisector of an angle of a triangle divides the opposite side into segments proportional to the adjacent sides. Prove.
8. How many sides has a polygon if the sum of its exterior angles is one-half the sum of its interior angles?
9. The diagonals of a parallelogram bisect each other. Prove.
10. Draw the common tangents to two circles.

RHETORIC.

(Any eight, but no more.)

1. Name and distinguish the fundamental species of prose composition.
2. Distinguish the censuous oration from the intellectual oration.
3. Of the three species of poetry—lyric, epic, dramatic—which develops first in the natural growth of literature? Why does it develop first?
4. Show that there is, or is not, a difference between the historical novel and the romantic history. Classify some works, giving reasons for your placing of them.
5. What is the difference in the organization of the essay and the treatise?
6. What is "perspective" in history writing?
7. What effect does the time limit have on the units of organization of a discourse?
8. What is delineative description? Is there much of it in literature? Cause?
9. State the qualities and merits of the balanced sentence.
10. May a knowledge of the rules of composition be a hindrance rather than a help to a writer? Explain fully.

ENGLISH LITERATURE.

(Any eight, but no more.)

1. Dr. Hinsdale, in his book "Teaching the Language Arts," says: "Literature, therefore, has a grand teaching function, instructing men (a) in politics, (b) in morals and manners, (c) in taste, and (d) in religion."
   Name four authors whose work is illustrative of a, b, c, d, respectively, of the foregoing.
2. Characterize briefly the work of Charles Dickens as a novelist.
3. What is the nature of lyric poetry? Name one of the great masters of lyric poetry.
4. (a) Contrast Macaulay and Carlyle as prose writers. (b) Contrast Shelley and Keats, suggesting poems to illustrate your points.
5. What is a sonnet? Name four famous sonneteers.
6. Discuss briefly Defoe, Richardson, Eliot and Ward as representatives in the development of the novel, giving significant dates.
7. Place Goldsmith in the history of English literature and estimate the literary qualities of his prose and verse.
8. Discuss the Elizabethan age. Give special emphasis to causes of its greatness.
9. Mention the great English elegies; choose two and discuss fully.
10. Who, in your opinion, is the greatest poet of the last century? What are his two greatest works? Discuss one fully.

GENERAL HISTORY.

(Any eight, but no more.)

1. Compare and contrast the civilization of Egypt with that of Greece.
2. Why is the battle of Marathon considered one of the decisive battles of the world?
3. What were the causes that led to the decline and downfall of the Roman Republic?
4. What gave rise to feudalism? What were some of the defects? What caused its decay?
5. If any, what influence had the Crusades in bringing about the Revival of Learning?
6. What important matters in government and civilization were settled by the Treaty of Westphalia?
7. Give causes and results of the War of the Spanish Succession?
8. What were the advantages and disadvantages, to England, of the Norman Conquest?
9. Contrast the public life and character of Wolsey with that of Bismarck. What, if anything, did each do for the advancement of civilization in Europe?
10. Give causes and results of the Franco-Prussian War. What can you say of its duration?

GEOLOGY.

(Any eight, but no more.)

1. Give appearance, formation, physical properties and composition of quartz, kaolin, shale, marble, and granite.
2. Discuss the carboniferous period.
3. Discuss water as a mechanical agent in geologic formations.
4. What is hydraulic limestone? Oolitic limestone? Where found in Indiana?
5. Compare the life of the Devonian era with that of the tertiary period.
6. What was the effect of the glacial period upon the geology of North America?
7. How do you account for continental plateaus and oceanic depressions?
8. How does the geologist account for the existence of gas and oil fields?
9. Compare the geology of northern Indiana with that of the southern part of the State.
10. What is your theory of mountain formation?

Notice.—The State Board of Education, at its meeting March 22, 1895, resolved that it reserve the right to call before it any applicant for Life State or Professional License for oral examination in addition to the written examination based upon the questions herewith submitted.

For the State Board of Education:

FRANK L. JONES,
State Superintendent Public Instruction, President.

W. W. PARSONS,
President Indiana State Normal School, Secretary.

Notes to the Examiner.—1. In October, 1895 (p. 52, record), the State Board of Education made the following order: Ordered, That the Reading Circle examinations in the Science of Teaching be accepted by County Superintendents in place of the county examinations on that subject, and that the average of their four successive yearly examinations in the Science of Teaching be accepted by the State Board in the examination for State Certificates.

2. The State Board of Education reserves the right to call before it any applicant for oral examination, in addition to the written examination based upon the questions submitted for Life State and Professional Licenses (p. 429, record).

3. Please send manuscripts on Monday following the examination.

Examination Questions—For County and State Common School License and First Division of Sixty Months' State High School License.

RULES FOR EXAMINATION.

1. These questions shall be used on the last Saturday of the month only.

2. During the examination, all books, maps, globes, or other aids, shall be removed from sight.

3. The writing of applicants should be done in every case with pen and ink, to prevent erasures and changes.

4. All conversation or communication should be absolutely forbidden during the examination.

5. At no time during the examination should any questions be shown, except such as have been or are then being used.

6. The printed lists should be divided, so that no opportunity or temptation may be given to applicants to refer to authorities at recess.

7. Applicants should not be permitted to ask questions. If they have any doubts as to the meaning of a question, let these be offered in writing so that the Superintendent may consider them when he examines the answers to the question.

8. If a correction is necessary, erasures should not be made, but a single mark should be drawn over the error, that the Superintendent may see the error as well as the correction. In arithmetic, the entire work should appear on the manuscript.

9. Each subject shall be graded on a scale of a hundred, each question being valued at an equal part of one hundred, except when marked otherwise.

10. These rules should be given the applicants before entering upon the examination.

The Board suggests that, since many questions admit of a variety of answers, credit be given for the intelligence shown in the answers, rather than for their conformity to the views of the Superintendent.

Note 1.—Neither the State Board of Education nor any member of the Board prepares for publication in any periodical whatever, answers to the questions asked by this State Board of Education. The State Board is not in any way responsible for any such publication.

Note 2.—For the information of applicants for teachers' license the following orders of the State Board of October, 1895, is here printed in full (p. 52 record):

"Ordered, That the Reading Circle examinations in the Science of Teaching be accepted by County Superintendents in place of the county examination on that subject, and that the average of their four successive yearly examinations in the Science of Teaching be accepted by the State Board in the examination for State certificates."

"Ordered, That the Reading Circle examinations in the General Culture book be accepted by County Superintendents in place of the county examination in Literature, and that the average of their four successive yearly examinations in the General Culture books be accepted by the State Board in the examination for State Certificates."—May 14, 1896.

WRITING AND SPELLING.

The penmanship shown in the manuscripts of the entire examination will be graded on a scale of 100, with reference to legibility (50), regularity of form (30), and neatness (20). The handwriting of each applicant will be considered in itself, rather than with reference to the standard models.

The orthography of the entire examination will be graded on a scale of 100, and 1 will be deducted for each word incorrectly written.

In each list answer any six, but no more.

ARITHMETIC.

Absolute accuracy in processes and answers required. County Superintendents should grade accordingly.

1. State how you would teach a child to determine by "inspection" the prime factors of 32; of 70; of 96.
2. I paid $2,075 for sugar, and sold it for 19-20 of what it cost me, thereby losing ¼ dollar per barrel. How many barrels were there in the purchase?
3. What will it cost to plaster a hall 90 feet long, 70 feet wide, and 30 feet high at 55 cents a square yard?
4. From a wagon of bran I lose 50 per cent. I sell 25 per cent of what is left, what per cent. of what I lost do I have left?
5. What profit does a paperhanger realize on his sale of 1,000 rolls of paper costing him 8 cents a roll if he sells 80 per cent. of it at 80 per cent. profit, but the rest at cost?
6. On a property valuation of $3,000,000 the sum of $95,000 must be raised. What tax rate on $1.00 must be levied?
7. If a ball two inches in diameter weigh 3 pounds, what will a ball of the same material 6 inches in diameter weigh?
8. $\frac{2x}{3}+\frac{3x+4}{5}=x+\frac{3x-4}{8}$, $x=?$

HISTORY.

1. "Our institutions are Teutonic in origin: They have come to us through English institutions." Justify the foregoing statement.
2. In what respects was the introduction of negro slavery into the Southern Colonies an advantage? In what respects a disadvantage?
3. What was the British plan of campaign for 1777?
4. With what invention or discovery are the following named men respectively connected: Eli Whitney, Samuel F. B. Morse, William T. G. Morton, Robert Fulton, Elias Howe?
5. What States organized the Confederate Government? What States joined afterward in this attempt to found a new Government?
6. What is the law governing the succession to the Presidency? When was it enacted?
7. With what great enterprises are the names of the following men respectively connected: George Rogers Clark, DeWitt Clinton, Lewis and Clark, Cyrus W. Field, James B. Eads?
8. What history work should be given the pupil prior to his taking up the regular text-book in American History?

Europe in the Nineteenth Century.

1. Give the main provisions of the English Reform Bill of 1832.
2. Who were Walpole, Wellington, Disraeli, Pitt, Gladstone, Clive?
3. What are the sources of membership in the House of Commons and the House of Lords in England?
4. What were the demands of the Chartists?
5. What is the Irish Question?

6. What are the important elements entering into the Eastern Question? (This refers to the older Eastern Question.)
7. What are the forms of government in Switzerland? Holland? Belgium?
8. What is the referendum in Switzerland?

PHYSIOLOGY AND SCIENTIFIC TEMPERANCE.

1. What is the chemical composition of alcohol?
2. What is the base of the proteid matter of which the tissues of the body are mainly built up?
3. What are the most common dangers from the use of impure water?
4. What impurities are apt to find their way into "surface wells?"
5. What is the principal function of the water taken into the body?
6. Which, in general, is more wholesome, soft water or hard? Why?
7. What are the physiological benefits of cleanliness of person, of dress and of surroundings?
8. What is the capacity of the lungs? How much air is taken into the lungs in an ordinary inspiration?

READING.

"Build thee more stately mansions, O my soul,
As the swift reasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
Till thou at length are free,
Leaving thine outgrown shell by life's unresting sea!"

1. From what poem is the foregoing stanza quoted? Tell what you know of the author. Name some of his best known productions.
2. What is the purpose of this poem?
3. What preparation would you make for bringing this purpose within the comprehension of a fifth reader pupil?
4. Do you think it better to take one complete selection, such as Ruskin's King of the Golden River, than to take parts of several equally good productions in the same time? If so, why?
5. What is the effect on the reading, of being directly conscious of every word on the page? Of being conscious of the letters, punctuation marks, etc.?
6. Which is the more rapid, silent reading or oral reading? Why?
7. Why should the teacher of reading be able to read well himself?
8. What is the value of committing to memory choice pieces of poetry and prose?

GEOGRAPHY.

1. Are north-south lines upon the earth straight? Are they parallel? Are east-west lines straight? Are they parallel?
2. Locate the region on the opposite side of the earth from Indiana.

3. Why is northern Indiana level and poorly drained and southern Indiana hilly and well drained?
4. Name and locate the two largest rivers in the world. Why are they near the equator?
5. What are canyons? Mesas? Buttes? Cliffs? In what part of the United States are they most numerous?
6. Locate the line of the Siberian railway. By whom is it being built? For what purpose?
7. Where and what are Capetown, Samoa, Panama, the Bosphorus, Aden?
8. What grand division contains more than half the people in the world?

ENGLISH GRAMMAR.

"Soon o'er the yellow fields, in silent and mournful procession,
Came from the neighboring hamlets and farms the Acadian women,
Driving in ponderous wains their household goods to the seashore."

—Longfellow.

1. What kind of a sentence is the above (a) with respect to its structure? (b) with respect to its use?
2. Classify the phrases according to use and tell what they respectively modify.
3. Parse (a) soon, (b) came, (c) neighboring, (d) their, (e) goods.
4. Construct sentences containing (a) a noun clause, (b) an adjective clause, (c) an adverbial clause.
5. Justify the construction of the verbs in the following:
   (a) The committee has made its report.
   (b) The committee have left the building.
6. Write sentences using the participle (a) attributively, (b) appositively, (c) predicatively, and (d) absolutely.
7. Discuss the use of the future auxiliaries, shall and will.
8. How are the adverbs classified with respect to meaning? Give an example of each class.

SCIENCE OF EDUCATION.

1. Discuss manual training as a means of intellectual culture?
2. Show the relation between methods and aims in education.
3. Give a brief statement of Plato's discussion of the relation of education to the welfare of the Republic.
4. Distinguish between formal and informal education, and give the value of each.
5. How does the aim of education affect the course of study?
6. What materials are necessary to illustrate the subjects you intend to teach in any particular subject, and how do you expect to procure them?
7. What benefits have been looked for from the scientific study of children by teachers and mothers?
8. What plans can you propose for securing the interest and co-operation of the community with the school?

School Sanitation and Decoration.

1. What is the ideal location for a city school?
2. Discuss the development of schoolhouse architecture.
3. Discuss the fan systems of ventilation.
4. Give your ideas as to the necessity of baths in the public schools.
5. Discuss the use of various beautiful objects aside from pictures and casts in the decoration of the schoolroom.
6. Why is spinal curvature so common among school children?
7. Is it desirable to give instruction in sanitary science to the children, and why?
8. Give examples of pupil's work in which the idea of the beautiful has been applied.

LITERATURE.

1. Name the three great epic poems, together with their authors.
2. Give the characteristics of an epic poem.
3. Name three poets laureate of England.
4. Whom do you consider England's greatest poet? Why?
5. "I know not where His islands lift
Their fronded palms in air;
I only know I can not drift
Beyond His love and care."

Name the author of the above quotation and tell his nationality.

6. Give a brief biography of Oliver Wendell Holmes.
7. Name the author of each of the following: "The Great Stone Face," "Poor Richard's Almanac," "Compensation," and "Marble Faun."
8. Name a noted poet of nature and tell why he was so called.

MUSIC.

1. What are the scale names of the chromatic scale, ascending? The singing names?
2. What is the meaning of Rit? Of D. S.? Of Fine?
3. What is meant by transposition?
4. If one piece is written in two-two time and another in two-four time, should one be sung faster than the other?
5. What is it that determines the rapidity with which a piece is to be sung?
6. Write the scale in the key of E, bass cleff.
7. What is the use of the double bar?
8. If six of the scale has the pitch of E, what is the pitch of one of the scale?
9. If a song is written in the key of E flat, how can you get the pitch of one in that key from a C pitch pipe?
10. State briefly the pictures you would draw from the following stanza before teaching the music for it:

O the flushing of the forests, laying green upon the brown!
O the rushing of the torrents, from the snow-hills coming down!
O the growing of the grasses on the level prairie sands!
O the glowing of the blossoms, when the valleys clap their hands!

O the flashing of the rainbow on the butterfly's bright wings!
O the grieving joy of zephyrs, when a downing birdling sings!
O the quickening of the heart-beat when awakened like the sod!
It can see earth's resurrection and can hear the voice of God."

GENERAL QUESTIONS.

Note.—These questions must be answered in full by all applicants or the manuscripts will receive no attention.

1. Give your name or number. Give postoffice. Give age if under 21.
2. What other than the common schools has been your educational training?
3. What professional training have you received?
   When did you last attend school?
4. What works on Psychology or Pedagogy have you studied?
5. Have you taught school? How long? What grades?
6. In what county did you teach last year? What was your grade in success?
7. What grades of license have you held? In what counties? When?
8. Did you attend County Institute last year? Where? How many days?
9. Name the educational papers or periodicals that you take.
10. Do you read other educational papers? Name them.
11. Name the books of the Teachers' Reading Circle that you have read.
12. Have you given or received aid in any way during this examination? If so, explain fully.
13. How many Township Institutes did you attend last year? Did you take an active part in all?

For the State Board of Education:

FRANK L. JONES,
State Supt. Public Instruction, President.

W. W. PARSONS,
President Indiana State Normal School, Secretary.

AUGUST, 1902—EXAMINATION QUESTIONS—FOR SECOND DIVISION. SIXTY MONTHS' STATE LICENSE, AS PROVIDED IN H. B. 351, APPROVED MARCH 6, 1899; AND FOR COUNTY AND STATE HIGH SCHOOL LICENSE.

Note.—The requirements for a sixty-months' license are as follows: The first division, an average of 95 per cent., not falling below 85 per cent., in the "Common Branches;" the second division, an average of 75 per cent., not falling below 60 per cent. in any of the five branches as follows:

Group 1. Literature and Composition (required of all applicants).

Group 2. Algebra or Geometry (one required).

Group 3. Botany, Zoölogy, Chemistry, Physics or Physical Geography (one required).

Group 4. History and Civics, Latin or German (one required).

Group 5. One subject from "2," "3," or "4" not already taken. Five subjects are required in this division.

In order to secure a sixty-months' license the MSS. of both divisions must be sent to this department by number, for gradation. The fee of $1.00 must be sent with the MSS. in each division.

BOTANY.

(Any eight, but no more.)

1. Distinguish between cytology and histology.
2. Why have trees generally inconspicuous flowers?
3. Are the edible parts of a radish, artichoke, asparagus and apple-root, stem or leaf?
4. What vegetable foods are a substitute for meat? Why?
5. Does degeneracy tend to ultimate extinction necessarily? Give reason for your answer.
6. Do plants sleep? What leads you to think they do or do not?
7. Why do you think the mushroom is, or is not, a degenerate plant?
8. What are swarm spores?
9. How do these trees get their leaves to the light: Beech, sugar, Norway spruce, walnut?
10. How can a fern gain a foothold on the shear face of a rock wall 40 feet up?

GERMAN.

1. Translate into English:

   Es ist ein frommer Wunsch alle Yäter, das, was ihnen selbst abgegangen, an den Söhnen realisiert zu sehen, so ungefähr, als wenn man zum zweitenmale lebte und die Erfahrungen des ersten Lebenslaufes nun erstrecht ausnutzen wollte. Im Gefühl seiner Kenntnisse, in Gewissheit einer treuen Ausdauer und im Mifstrauen gegen die damaligen Leher, nahm der Vater sich vor seine Kinder selbst zu unterrichten und nur so veil, alses nötig schein, einzelne Stunden durch eigentliche Lehrmeister zu besetzen. Ein pädagogischer Dilettantismus fing such überhaupt schon zu zeigen an. Die Pedanterie und Trübsinnigkeit (gloomliness, dullness) der an öffentlichen Schulen angestellten Lehrer mochte wohl die erste Veranlassung dazu geben. Man suchte nach etwas Besseren und vergass, wie mangelhaft aller Unterricht sein muss, der nicht durch Leute vom Metier (professional men, trained teachers) erteilt wird.—Goethe.
2. Why does the preposition "an" govern the dative in l. 2 and l. 9? Give the other prepositions that may govern the dative or accusative.
3. Expand the attribute and its modifier into a relative clause in: Der an öffentlichen Schulen angestellten Lehrer.
4. Give the dative singular and plural together with the pronoun unser: Wunsch, erster Lebenslauf, Kenntnis, pädagogischer Dilettantismus, Pdanterie.
5. Conjugate the following sentences in the pluperfect indicative and subjunctive and in the two conditional tenses:

Man wollte die Erfahrungen nutzen. Der Vater nahm sich vor. Die Pedanterie mochte die Veranlassung geben. Aller Unterricht muss mangelhaft sein.

6. Give the following passage from the third act of Shakespeare's Julius Cæsar as it would appear in the form of indirect statement:

Erster Bürger. Mich dünkt, in seinen Reden ist viel Grund.

Zweiter Bürger. Wenn man die Sache recht erwägt, ist Cäsarn Gross Unrecht widerfahren.

Dritter Bürger. Meint ihr Bürger? Ich fürcht', ein Schlimm'rer kommt an seine Stelle.

Vierter Bürger. Habt ihr gehört? Er nahm die krone nicht, da sieht man, dafs er nicht herrschsüchtig war.

Erster Bürger. Wenn dem so ist, so wird es manchem teuer zu stehen kommen.

Zweiter Bürger. Ach, der arme Mann! Die Augen sind ihm feuerrot vom Weinen.

Dritter Bürger. Antonius ist der bravste Mann in Rom.

Vierter Bürger. Gebt acht, er fängt von neuem zu reden.

7. Translate: Many a losses his good name by visiting bad company.
8. Translate: Before opening the letter, he sat weeping a long time.
9. Explain in German the meaning of the last two lines of the following passage:

Die Menschen, in der Regel,
Verstehen sich aufs Flicken und aufs Stückeln,
Und finden sich in ein verhafstes Müssen
Weit besser als in ein bittre Wahl.

—Schiller.

10. What is the subject and character of Goethe's Dichtung und Wahrheit, and what does this title imply?

GEOMETRY.

(Any eight, but no more.)

1. Prove that two perpendiculars to the same straight line are parallel.
2. Prove that two triangles are equal when the three sides are equal respectively to the three sides of the other.
3. Construct an angle of 60 degrees. Explain.
4. Define (a) similar, (b) equal, (c) equivalent.
5. Prove that the homologous altitudes of two similar triangles are in the same ratio as any two homologous sides.
6. Find the dimensions of a rectangle whose area is 168, perimeter 52.
7. Find the radius of a circle equivalent to a square whose side is 10.
8. Prove that through a given point a plane can be drawn parallel to any two straight lines in space.
9. Find the volume of a regular hexagonal pyramid, each side of whose base is 4, and whose altitude is 9.
10. What is the difference between the altitude and slant height of a pyramid?

LITERATURE AND COMPOSITION.

(Any eight, but no more.)

1. Write a paragraph of about one hundred and fifty words, using as a topic-sentence "Shakespeare was a many sided genius."
2. Characterize briefly the work of the following writers: Langland, Spencer, Dryden, Swift, Byron.
3. (a) Name one very early English drama, two dramas of the Renaissance, one drama of the Restorattion, one modern drama. (b) Give the author in each case.
4. Comment upon the subject matter, the form and the style of Milton's poetry; of his prose.
5. (a) Mention four poets who have increased our love of nature. (b) Support your statement by naming poems.
6. Distinguish between either (a) The problem and the purpose novel, or (b) The realistic and the romantic novel.
7. (a) What English writers have called attention to the following social evils: The sweat shop, debtor's prison, the school system? (b) What English novelist has satirized modern society?
8. Discuss briefly the rise and development of English fiction.
9. "Snowbound;" (a) Author. (b) Subject matter. (c) Versification. (d) Style.
10. Compare and contrast the work of any two American humorists.

PHYSICS.

(Any eight, but no more.)

1. What is the vortex theory of matter?
2. Distinguish between an atom and a molecule.
3. What is the force in capillarity?
4. What are some of the evidences of the conservation of matter?
5. Describe the physical changes that take place when a liquid passes into a state of crystallization.
6. What is the difference between the kinetic and potential energy?
7. What is meant by the mechanical equivalent of heat?
8. Why is the velocity of sound independent of barometric pressure?
9. Explain prismatic dispersion of light.
10. Upon what does the voltage generated by a dynamo depend?

CHEMISTRY.

(Any eight, but no more.)

1. What substances are formed when steam is passed over red hot iron filings? In what other way can either of these substances be prepared?
2. How can it be shown that a given substance contains water of crystallization? Illustrate.

3. What are formed when common salt is treated with concentrated sulphuric acid In what other ways can the same substances be prepared?
4. What is the periodic law? Of what service has it been to chemistry?
5. (1) ions, (2) radicals, (3) anhydrides, (4) valence. Illustrate each by an example.
6. What substances are obtained from crude petroleum oil? Upon what property of each substance does its separation from the others depend?
7. How is coke made? For what is it used?
8. What minerals contain the following elements: chlorine, phosphorus, sulphur, manganese, lead?
9. What are the most recently discovered elements?
10. What volume of oxygen will it require to burn completely ten litres of acetylene gas (C_2 H_2)? C=12, O=16.

GENERAL HISTORY AND CIVICS.

(Any eight, but no more.)

1. What important thing was determined by the battle of Hastings?
2. What was the edict of Nantes? Why was it revoked?
3. What conditions in Europe led to the Embargo Act in America?
4. Who were Joan of Arc, Demosthenes, the Gracchi, Alcibiades?
5. Give a list of five historical novels suitable to be read in connection with English and American history, and state what period is covered by each.
6. What are some good works on English history? American history?
7. Who were the Carbonari? Young Italy?
8. Give reasons in full for the location of the National Capitol in the South.
9. Why were the Phœnicians a commercial people?
10. Give an account of the workings of the Hanseatic League. The Zollverein.

PHYSICAL GEOGRAPHY.

(Any eight, but no more.)

1. Give the characteristics of a public road system for a hilly region. For a level region. Account for the differences.
2. Discuss the relation between our weather changes and the passages of cyclones and anticyclones.
3. What effect does the rotation of the earth have upon wind direction? Explain.
4. Give, and account for the climate of southern California. Account for the rainfall that accompanies a thunder storm.
5. What value do you place on systematic weather observations in teaching Physical Geography? Give reasons for your answer.
6. Compare and contrast the relief of North America and South America.
7. (a) What are the effects of land masses on temperature? (b) How are the winds affected by the temperature produced?

8. What are contour maps? Of what use are they in teaching the subject of Physical Geography?
9. Define physiography. Give what you consider the central thought in the subject.
10. (a) Outline a lesson in field work. (b) In laboratory work.

ALGEBRA.

(Any eight, but no more.)

1. Remove parentheses and combine—
$$3a-\left[2b-a-(b+2a)-(a-b)+a-2b\right]$$
2. Factor $9x^4-4x^2+4x-1$.
3. Does $\sqrt{108 \times 27 \times 250 \times 490}=6 \times 9 \times 5 \times 70$? Demonstrate.
4. $1/6(x+12)=1/7(6+3x)-1/6x$. Find x.
5. If the tail of a fish weighs 9 lbs., his head as much as his tail and half his body, and his body as much as his head and tail, what is the weight of the whole fish?
6. $1/x+1/y=1$; $1/x+1/z=2$. $1/y+1/z=3$ 2. Find x, y and z.
7. $\frac{x}{a-x}-\frac{a-x}{x}=\frac{a}{x}$. Find values of x.
8. Find the first five powers of $\sqrt{-1}$.
9. What are oranges worth a dozen if by buying 15 more for a dollar the price would be lowered 4 cents a dozen?
10. What ends are sought in the teaching of algebra in the high school?

ZOÖLOGY.

(Any eight, but no more.)

1. Why should we know what a bird eats?
2. Describe a ground squirrel's teeth.
3. Are all little fishes minnows? Give a minnow's characteristics.
4. What is a corpuscle of Punkinje? Where are these corpuscles found?
5. Why has a louse no wings?
6. Describe the limbs of a rabbit and a mole, and tell how they are adapted in each case to the animal's needs.
7. Why does an ox chew his cud? Why has he a large girth?
8. What is your estimate of the Journal of Morphology, or some other paper published in the interest of Zoölogy, with which you are acquainted?
9. Name two important works in Zoölogy and compare their merits.
10. How is the owl adapted to catch his prey?

LATIN.

(Any six, including 1 and 2.)

1. Translate into idiomatic English: Cum Cæsar in Galliam venit, alterius factonis principes erant Aedui, alterius Sequani. Hi cum per se minus valerent, quod summo auctoritas antiquitus erat in Aeduis magnaeque eorum erant clientelæ, Germanos atque.

Ariovistum sibi adiunxerant. Prœliis vero compluribus factis secundis atque omni nobilitate Aeduorum interfecta tantum potentia antecesserant, ut magnam partem clientium ab Aeduis ad se traducerent obsidesque ab iis principum filios acciperent et publice iurare cogerent, nihil se contra Sequanos consilii inturos, et partem finitimi agri per vim occupattam possiderent Galliæque totius principatum obtinerent.

2. Translate into Latin: (a) He was the grandson of the only man who was very powerful or surpassed his fellow citizens in courage. (b) Tell me whether they will use their power for gaining more, or to hold what they have.
3. What endings are peculiar to the declension of pronouns?
4. State in detail and illustrate by examples the general rules for the position of the Latin accent. When are final a final e long. When short?
5. Who was Dido? Titus Labienus? Agamenon? Polyphemus? Plautus?
6. Translate into idiomatic English: Servi mehercule mei si me isto pacto metuerent, ut te metuunt omnes cives tui, domum meam relinquendam, putarem: tu tibi urbem non arbitraris? Et, si me meis civibus iniuria suspectum tam graviter viderem, carere me aspectu civium quam infestis omnium oculis conspici mallen.
7. Give the resason for the case of tibi in the preceding passage, of aspectu, of iniuria, of oculis.
8. What is the value of written translation? Of oral translation? How much written translation would you ask of a class?

For the State Board of Education:

FRANK L. JONES,
State Supt. Public Instruction, President.

W. W. PARSONS,
President Indiana State Normal School, Secretary.

March, 1902—Examination Questions for County and State Primary License.

(Sample Questions.)

Order of the State Board of Education in May, 1887.—"It is hereby ordered that there shall be prepared by the Board suitable questions upon primary school work, and the State Superintendent shall furnish the several county superintendents, for use at the regular monthly examinations in June, July and August of each year, in the examination of such applicants as are employed to teach in the four lowest grades (years) of the schools in cities and incorporated towns as elect to pass such special examination and who furnish to the county superintendent a written certificate of the school superintendent, or secretary of the school board, of their employment in such schools. In grading applicants for primary license the same grade shall be observed as in the examination of applicants for common school license, and such license shall entitle the holder to teach in such primary grades within the town and city schools, as

provided in Sec. 4425 R. S., as amended by acts of 1883. (School law of 1885, Sec. 4425.)

Note.—The State Board of Education, at its January meeting, 1889, ordered that the examination for primary license be held on the last Saturdays of March, April and May, instead of in June, July and August, as heretofore.

RULES FOR EXAMINATION.

1. These questions shall be used on the last Saturday of the month only.

2. During the examination, all books, maps, globes, or other aids, shall be removed from sight.

3. The writing of applicants should be done in every case with pen and ink, to prevent erasures and changes.

4. All conversation or communication should be absolutely forbidden during the examination.

5. At no time during the examination should any questions be shown, except such as have been or are then being used.

6. The printed lists should be divided, so that no opportunity or temptation may be given to applicants to refer to authorities at recess.

7. Applicants should not be permitted to ask questions. If they have any doubts as to the meaning of a question, let these be offered in writing so that the Superintendent may consider them when he examines the answers to the question.

8. If a correction is necessary, erasures should not be made, but a single mark should be drawn over the error, that the Superintendent may see the error as well as the correction. In arithmetic, the entire work should appear on the manuscript.

9. Each subject shall be graded on a scale of a hundred, each question being valued at an equal part of one hundred, except when marked otherwise.

10. These rules should be given the applicants before entering upon the examination.

WRITING AND SPELLING.

The penmanship shown in the manuscripts of the entire examination will be graded on a scale of 100, with reference to legibility (50), regularity of form (30), and neatness (20). The handwriting of each applicant will be considered in itself, rather than with reference to the standard models.

The orthography of the entire examination will be graded on a scale of 100, and 1 will be deducted for each word incorrectly written.

LANGUAGE

(Answer six, but no more.)

1. Of what value is it to children to reproduce a story that has been read to them? Would you encourage them to use the words of the book? If so, why?

2. Of what value is it to a child to see an experiment performed, or to examine a plant or animal and to write down what he has observed? Is there anything to be gained by this that can not be gained from such an exercise as indicated in question one? If so, what is it?
3. What influences has the teacher to combat when endeavoring to teach the children to speak correctly?
4. By what means does the child acquire his vocabulary? In view of this what should characterize the teacher's speech?
5. Name a half dozen of the most noticeable mistakes in children's language papers.
6. Draw lines to indicate a sheet of paper, and on it write the heading for a business letter.
7. Why do children make mistakes in composition that they are able to correct readily if questioned?
8. Is it worth while to give exercises in which children have a list of words to put into sentences? Give your reasons.

ARITHMETIC.

(Answer six, but no more.)

1. How many ¼-inch cubes are there in a two-inch cube?
2. Picture the following problem by means of circles: A boy had ⅛ of a pound of candy and he bought ¾ of a pound. How much had he then? Show the result in lowest terms and omit no step.
3. Picture the following as in 2: A man gave 5-12 of a peck of corn to each of five horses. How many pecks of corn did it take? Show the result in lowest terms and picture every step.
4. What is the value of the sense training so widely advocated at the present time in number work?
5. At what time in the child's school life is it worth while to teach him figures? Why?
6. Are there any dangers in the use of objects in number work? If so, what are they?
7. How many square yards of plastering are there in a room 14 feet long, 12½ feet wide and 8 2-3 feet high, having a base board 9 inches high, if no allowance is made for doors and windows? The result as well as the process must be right.
8. Show by means of a diagram an effective method for teaching children of the third or fourth grade how to find the area of a rectangular surface. Write out the explanation you would expect the pupil to give.

HISTORY.

(Answer six, but no more.)

1. Should the study of history begin with the biography of some man of the present time or with the early civilization of man? Why?
2. In the life of Israel Putnam, what can you find for character building?
3. When was Indiana organized as a territory? When was it made a State? Name and locate its first State capital.

4. What importance would you attach to the use of pictures in the study of history in the lower grades?
5. By whom was the cotton gin invented? In what way has it influenced the expansion of our country?
6. What can you tell of the Underground Railroad? What legislation was enacted on account of its organization?
7. What would you teach a third year pupil about the life and character of Pericles?
8. To a second year pupil, what is there interesting in the study of the city of Babylon?

READING.

(Answer six, but no more.)

1. What use may be made of pictures in text-books in reading?
2. To what extent would you train a third reader child in the "mechanics of a book," viz.: the meaning of the title page, the table of contents, the index, the division into chapters and paragraphs?
3. Is concert reading advisable? State reasons for answer.
4. What should be the educational equipment of a teacher about to teach a class of beginners in reading?
5. The tendency on the part of many children is to read indistinctly and with but little expression. Explain your method of preventing these faults in your school.
6. What seat work, as related to reading, would you give the children?
7. Dr. Hinsdale says in his book "Teaching the Language Arts," "The proper preparation for the mind for reading comes from many sources—personal observation of nature and personal contact with men, previous acquaintance with books, and reflection upon what one has seen and heard. Of all these sources nature contributes to the child's mind the most valuable facts, ideas and images." Brifly discuss this.
8. What directions or suggestions should the teacher give in assigning a new lesson to third reader pupils?

SCIENCE OF EDUCATION.

(Answer six, but no more.)

1. What is the difference between science and art in the department of Pedagogy?
2. Are the body and soul mutual in their influence? If so, which is most powerful in its influence upon the other?
3. Is the child's mind different from that of the man?
4. What are the most favorable bodily conditions for good memory?
5. What are the most favorable mental conditions for good memory?
6. Is the main purpose in teaching that of enabling the pupil to remember what was learned? Why, or why not?
7. Explain the pedagogical value of repetition.
8. Why is example more influential, on the part of the teacher, than precept?

PHYSIOLOGY.

(Answer six, but no more.)

1. What relation does the health of the body bear to the moral activity of the child? What would this suggest in the teaching of physiology?
2. Give the structure of the walls of the stomach and tell the use of each part. Why does the tongue show the condition of the stomach?
3. Describe the liver and give its functions.
4. Give the composition of the blood and tell the use of each part.
5. Draw a diagram of the ear. Name and give functions of each part.
6. What is the composition of pure air? What impurities are usually found in the air in a schoolroom? How may this be remedied?
7. What is alcohol and how produced? Name three beverages used commonly that contain alcohol and give the per cent. each contains.
8. If alcohol is taken regularly and in small quantities, what effect is it said to have on the tissues of the body?

ENGLISH AND AMERICAN LITERATURE.

(Answer six, but no more.)

1. (a) Upon what production does the fame of Swift rest?
   (b) What characteristics distinguish Goldsmith?
2. In what respect does the character of Scott's literary work most closely approach that of Shakespeare?
3. Name three leading English historians and give one or more of the principal productions of each.
4. Name five juvenile books that can profitably be used in connection with the study of geography.
5. Name four periodicals of a juvenile character published in the United States that you deem worthy of being placed in the hands of young people
6. Name four American poets and give a quotation from each.
7. Name five Indiana authors whose productions are popular.
8. How may the teaching of reading in the schools develop in pupils a love of good literature?

GEOGRAPHY.

(Answer six, but no more.)

1. What geographical ideas do the children gain from a study of Jane Andrew's book, entitled "The Seven Little Sisters?"
2. How does the study of geography, as we have it in the primary grades, train the imagination?
3. (a) Name the six largest cities of Indiana in the order of their size.
   (b) Locate Vincennes and Fort Wayne.
4. (a) What is meant by the equatorial rain belt?
   (b) What is meant by heat belts?
   (c) What heat belts cross the United States?

5. (a) What is the chief occupation of the people of the New England States?
   (b) Give reasons why it is so.
   (c) What are the chief industries of the Western Central States? Give reasons.
6. Name two large rivers of Africa and tell something of interest about each.
7. Locate—Shanghai, Melbourne, Odessa, Sitka, and Quebec.
8. (a) What is a delta?
   (b) How would you present the idea "delta" to pupils?

GENERAL QUESTIONS.

Note.—These questions must be answered in full.

1. Give your name, age and postoffice address.
2. What special preparation have you made for teaching?
3. Name the educational papers and periodicals that you take and read.
4. Name the books on theory and practice of teaching that you have read.
5. How many days were you present at the last County Institute
6. Have you taught school? What grade? How many months?
7. For how many months was your last certificate granted?
8. Have you given or received aid during this examination?
9. Have you ever held a six months' license in this county?
10. Did you take an active part in the Township Institutes of the township in which you taught last year?
11. What books of the Reading Circle course have you studied, and when?

Note 1.—Neither the State Board of Education nor any member of the Board prepares for publication in any periodical whatever, answers to the questions asked by this State Board of Education. The State Board is not in any way responsible for any such publication.

Note 2.—For the information of applicants for teachers' license the following orders of the State Board of October, 1885, is here printed in full (p. 52 record):

"Ordered, That the Reading Circle examinations in the Science of Teaching be accepted by County Superintendents in place of the county examination on that subject, and that the average of their four successive yearly examinations in the Science of Teaching be accepted by the State Board in the examination for State certificates."

"Ordered, That the Reading Circle examinations in the General Culture book be accepted by County Superintendents in place of the County examination in Literature, and that the average of their four successive yearly examinations in the General Culture books be accepted by the State Board in the examination for State Certificates."—May 14, 1896.

The Board suggests that, since many questions admit of a variety of answers, credit be given for the intelligence shown in the answers, rather than for their conformity to the views of the Superintendent.

For the State Board of Education:

FRANK L. JONES,
State Supt. Public Instruction, President.

W. W. PARSONS,
President Indiana State Normal School, Secretary.

(g) COMMON SCHOOL QUESTIONS, FOR CHILDREN COMPLETING COMMON BRANCHES.

Sec. 6. The County Superintendent shall provide for the examination of all applicants for graduation in the common school branches from township, district or town schools during the months of March, April and May, and furnish them certificates of graduation, if in the judgment of the County Superintendent they are entitled thereto, which shall entitle the recipients to enter any township, town or city high school of the State if he be otherwise entitled to the privileges thereto.

County Diploma Examinations.

In 1883 the Convention of County Superintendents adopted the following resolutions:

1. That a standing committee be appointed by this Convention, consisting of five County Superintendents and one member of the State Board of Education, with the State Superintendent as chairman.
2. That this committee prepare three lists of questions on the eight common school branches, and the United States Constitution, to be furnished the County Superintendents for examination of candidates for graduation from the district schools.
3. That such examination be held on the third Saturday of the month.
4. That diplomas be granted to pupils who shall attain an average of 75 per cent., and shall not fall below 60 per cent. in any branch.
5. That graduating exercises be held in each township when practicable, under the supervision of the Superintendent.

The examination shall be conducted by the County Superintendent in person, at a convenient place in the township, or by the Township Trustee, assisted by a teacher selected by him if necessary.

Graduating exercises are held annually in the corporations which have pupils completing the common school course. The result of these exercises is to inspire the pupils graduating with a desire for the higher work, to encourage pupils in the lower grades to complete the course, and to create a better school sentiment in the localities where held.

The annual examination of pupils completing the course of study in the "common branches" will be held on the third Saturdays of March, April and May each year, under the direction of the Township Trustee, or some one appointed by him. Questions for such examinations will be furnished County Superintendents from this Department, and it is requested that sufficient publicity be given the fact that all who have completed the course of study,

and who desire to pass such examination, may have knowledge of the time and place of holding the same.

Questions in "Scientific Temperance" will appear in connection with the subject of Physiology. The new subject will not appear on the diploma.

The County Superintendent will grade the manuscripts; but the examiner will report the grade of each pupil on the Oral Reading, valued at 50. Certificate of graduation will be issued to every applicant who attains a general average of 75 without falling below 60 in any subject.

Questions for Examination of Pupils Completing the Course of Study in "The Common Branches."

Prepared by the following Committee of the County Superintendents' Association, 1901: Superintendents Levi H. Scott, Floyd County; J. E. Payne, Jackson County; James H. Clark, Bartholomew County; Charles S. Royce, Ripley County; George R. Wilson, Dubois County; George S. Taylor, Jefferson County. To be used on the third Saturday in May, 1902.

INSTRUCTIONS.

Pupils need not copy the questions, but must number each answer to correspond with the question, and must write the manuscript in ink. When you are asked to answer "any six," or "any seven," etc., out of eight or ten questions respectively, stop when you have answered the number required. To answer more is a loss of time and may lower your grade, as all mistakes will be marked off.

Writing.—The penmanship shown in the entire manuscripts of the examination will be graded on a scale of 100 per cent., with reference to legibility (50), regularity of form (30), and neatness (20). The handwriting of each pupil will be considered in itself, rather than with reference to standard models.

Spelling.—The orthography of the entire examination will be graded on a scale of 100 per cent., and 1 per cent. will be deducted for each word incorrectly written.

The County Superintendent will grade the manuscripts, and certificates of graduation will be issued to every applicant who attains a general average of 75 per cent., without falling below 60 per cent. in any subject.

Notice to Applicants.—On the first white page in your manuscripts answer these requests:

1. Give your name or number.
2. Give your age.
3. Give number of your school district.
4. Give your teacher's name.
5. Give your trustee's name.

6. Give the name of your township.
7. Give your postoffice.
8. Give place of birth.
9. Give date of birth.
10. Give number of years you have attended school.

MUSIC

1. Give signature of the key of F. Where is Do in this key?
2. How do we express the degrees of force given to tones?
3. Give the effect of a flat on a tone. Illustrate.
4. Give the meaning of: Rit. cres. dim.
5. In ¾ measure, show the value of half and quarter rests.

U. S HISTORY.

(Any eight.)

1. Write what you know of Marco Polo and what effect, if any, his writings had on the discovery of America.
2. Give a brief biography of Captain John Smith.
3. In what way were the Articles of Confederation weak?
4. How many U. S. Senators has each State? By whom elected? Name the present Senators from our State.
5. What measures were resorted to during Washington's administration to raise money? Who proposed these measures?
6. Show how slavery divided our country into a North and a South.
7. What important events marked the administration of Jackson?
8. Name three Union and three Confederate Generals of the Civil War.
9. Discuss Reconstruction.
10. Give the terms of the treaty which closed the Spanish-American War.

ARITHMETIC.

(Any eight.)

1. What is involution, evolution, root, equation and surd?
2. How many yards of carpet 1½ yards wide will cover a floor 18 ft. long and 15 ft. wide?
3. How many barrels of water will a cistern hold whose diameter is 4 ft. and depth 6 ft.?
4. If 18 men, in 15 days, build a wall 40 rods long, 5 ft. high, 4 ft. thick, in what time can 20 men build a wall 87 rods long, 8 ft. high and 5 ft. thick? (Solve by proportion.)
5. A merchant buys a bill of goods amounting to $2,480; he can have 4 months' credit or 5 per cent. off for cash. If money is worth only 10 per cent. to him, what will he gain by paying cash?
6. What is the number to which if 15 be added the sum multiplied by 9, 11 taken from the product, the remainder will be 340?
7. What is the length of the longest paving stone that, without cutting, may be used in building four walks 140 ft., 185 ft., 240 ft. and 320 ft. long?

8. I wish to tether my horse to a stake so that he may graze on one acre: what must be the length of the rope?
9. What is the difference between the simple and the compound interest on $180 for 2 years at 8 per cent., if the interest is compounded semi-annually?
10. Give the laws of signs in division and illustrate with original problems.

PHYSIOLOGY.

(Any eight.)

1. Draw a diagram of the eye, showing arrangement of the coats and other parts.
2. What are efferent nerves? Afferent nerves?
3. What is the hair? Give its function.
4. Give the composition of air.
5. What is digestion?
6. Give the divisions of the permanent set of teeth. Number in each division.
7. Why does the body need food?
8. Draw a diagram showing the circulation of the blood.
9. What is a dislocation? A sprain?
10. Name five alcoholic drinks. Give per cent. of alcohol in each.

GEOGRAPHY.

(Any eight.)

1. Define the following: Flood plain, deltas, coastal plains, lake plains, plateaus.
2. Compare the Appalachian Highland with the Rocky Mountain Highland as to height, length and width.
3. Name the political divisions of North America. Which are independent countries?
4. Name six leading industries of the United States.
5. Locate the following: Liverpool, Charleston, Buenos Ayres, Honolulu, Yokohama.
6. Describe the climate of the Pacific slope.
7. Locate and tell for what each is noted: West Point, Annapolis, Great Salt Lake, Lake Superior, Niagara Falls, Yellowstone Park.
8. Describe the commerce between South America and the United States.
9. Locate and describe the Philippine Islands; (a) surface, (b) products, (c) inhabitants, (d) government.
10. Name in order of size the largest six cities of Indiana.

GRAMMAR.

(Any eight, not omitting the tenth.)

1. Define gender. Name and illustrate two methods of distinguishing gender.
2. Write sentences using the plural forms of the following: Potato, chimney, ox, money, beef, sheep.

3. Use the pronouns who, which, what and that in sentences.
4. Write sentences containing the possessive plural of the following words: She, child, it, lady, who.
5. Parse in full the italicized words in the following sentence: "*Give* every *man* thy *ear*, but few *thy* voice."
6. Analyze the following sentence: "What is done can not be undone."
7. Define an interjection. Write two sentences, each containing an interjection.
8. Copy the following sentences, filling the blanks with we or us:
   1. They were as unfortunate as ——.
   2. It could not have been —— that you heard.
   3. Let —— change our plans.
   4. They have greater responsibilities than ——.
   5. —— is a pronoun, objective form of ——.
9. Capitalize and punctuate the following words so as to form a sentence: have you anything to tell me little birds asked Ulysses.
10. Write a model business letter of not more than forty words.

READING.

"The White-Footed Deer."

1. What is the incident referred to in the poem? About when did it occur? In which State do you think it occurred? Why?
2. Describe the place where the "deer was wont to feed." When did she come there? Where did she go in the daytime?
3. In ten lines, tell what you can of the author.
4. What is a waxing moon? A crescent moon? A mead?
5. Reproduce the story, in prose, as fully as you can.

GENERAL STATEMENT.

After you have finished your examination, copy and fill the blanks in the following:

State of Indiana, County of .....

Township of .....

I am ..... years of age, have been a student in public schools for ..... years; and I do solemnly declare that in the examination today I have not given or received aid in any manner whatever.

*(Name or number) .....

(Postoffice) .....

Dated ....., 1902.

*Note.—Use name or number, as County Superintendent may desire.

QUESTIONS FOR EXAMINATION OF PUPILS COMPLETING THE COURSE OF STUDY IN "THE HIGH SCHOOL BRANCHES."

THIRD EXAMINATION.

Prepared by the following Committee of the County Superintendents' Association, 1901: Richard Park, Sullivan County, Chairman; H. E. Cushman, Greene County; Lee O. Harris, Hancock County; A. L. Gary, Rush County; E. C. Crider, Tippecanoe County; W. E. Wineburg, Wayne County. To be held Friday, June 6, 1902.

INSTRUCTIONS.

Pupils need not copy the questions, but must number each answer to correspond with the question, and must write the manuscript in ink. When you are asked to answer "any six" or "any seven," etc., out of eight or ten questions respectively, stop when you have answered the number required. To answer more is a loss of time and may lower your grade, as all mistakes will be marked off.

Writing.—The penmanship shown in the entire manuscripts of the examination will be graded on a scale of 100 per cent. with reference to legibility (50 per cent.), regularity of form (30 per cent.), and neatness (20 per cent.). The handwriting of each pupil will be considered in itself, rather than with reference to standard models.

Spelling.—The orthography of the entire examination will be graded on a scale of 100 per cent., and 1 per cent. will be deducted for each word incorrectly written.

The County Superintendent will grade the manuscripts, and certificates of graduation will be issued to every applicant who attains a general average of 75 per cent., without falling below 60 per cent. in any subject.

Notice to Applicants.—On the first white page in your manuscript answer these requests:

1. Give your name or number.
2. Give your age.
3. Give number of your school district.
4. Give your teacher's name.
5. Give your trustee's name.
6. Give the name of your township.
7. Give your postoffice.
8. Give place of birth.
9. Give date of birth.
10. Give number of years you have attended high school.

ALGEBRA.

(Any seven.)

1. Reduce to lowest terms:
$$\frac{3x^3 - 7x^2 + 4}{5x^3 - 17x^2 + 16x - 4}.$$
2. Find the H. C. D. $9x^2 - 35x + 24$ and $29x - 8x^2 - 15$.
3. Name and give examples of algebraic quantities.
4. Find two numbers, one of which is three times the other, and the sum of whose square is 40.
5. Solve the equation $x^4 - 25x^2 = -144$.
6. Prove that like powers or like roots of the terms of a proportion are in proportion.
7. If A's money were diminished by $5, he would have half as much as B; but if B's money were increased $36, he would have three times as much as A. How much has each?
8. State four axioms.
9. Find x, y and z:
   (1) $y - x + z = -5$.
   (2) $z - y - x = -25$.
   (3) $x + y + z = 35$.

10. (a) State the binomial theorem. (b) Illustrate.
11. Factor:
    (a) $x^4 - 2x^2 + 1$.
    (b) $81x^4 - 8x^2 + 16$.

LATIN.

N. B. Pupils who have had two years in Latin, answer any seven out of first eleven, and pupils who have had three years, any nine, two of which must be selected from Nos. 12, 13, 14 and 15.

1. Define penult, antepenult. Give rule for accenting a word of two syllables; of more than two syllables.
2. Compare altus, acer, similis, magus, in all genders.
3. Decline ego, hic, idem, qui, and conjugate tollo, tollere and sublatus in both voices, using synopsis in indicative and subjective modes, giving other forms in full.
4. Translate: Aedui ad caesarem celeriter renerunt, quod harudes carum fines vastabant. Caesar iter ob Helvetiis arertil quod copam frumenti obtinere non potest. In sumno colle duas legiones, quas in Gallia conscripserat, disponere potuit.
5. Translate into Latin: The troops were led forward to the nearest hill. The scouts saw that the enemy were in our camp. Caesar hastened with all his troops towards the Helvetians, who sent embassadors to him concerning surrender.
6. By what case is the agent expressed? The instrument? Time when? Time how long? How may purpose be expressed?

Caesar, Book I, Chapter 46.

7. Translate into English.
8. Give case of following words and tell why: Caesar, equites, lumulum, suis, periculo, hastibus, adrogantia and exercitui.

Caesar, Book II.

9. Translate: Ch. x.
10. From what are the following words derived: Factus, adgressi, andacissime, conantes, progredi, pugnandi and defendos?
11. Translate into Latin: Titurius was informed that a great number of the enemy had been killed after they had been surrounded by the Romans. Caesar knew that they had been deceived in regard to crossing the river and defending the town.

Virgil's Ænid, Book I.

12. Translate lines 227 to 241, inclusive.
13. Who is Venus? Why does she speak of Aeneas as "meus Aneas?" Explain meaning of "ob Italiani" in verse 232. Give case of oculos, verse 228, and give reason for its case.

Book II.

14. Translate lines 40-49. What reflection upon the character of Ulysses in verse 44? Is it just?

Cicero, Fourth Oration, Chapter 3.

15. Translate into English:

N. B. (Teacher write text on board.)

Translate into Latin the following, based on above text:

Who is there who does not know that this so deadly conspiracy of Catiline has been revealed by my diligence?

You perceive, Senators, how great the crime is and that many are implicated in it.

GERMAN.

Notes.—(a) Second year, answer No. 10 and any other seven. (b) Third year, answer No. 14 and seven others of the last twelve.

1. What difference exists between the English and German adjective? Illustrate.
2. Give four rules for the position of words in the German sentence.
3. Name a verb. Give its meaning, principal parts and synopsis.
4. Does the verb selected above belong to the strong, or weak conjugation? Why?
5. Give the present indicative, of the active, and the same of the passive of the verb loben.
6. Give the first ten cardinal numerals and ordinal numerals.
7. Name and compare three adjectives. Three adverbs.
8. What is an idiom? Name three idioms, giving their translation.
9. Name three uses of the subjunctive. Illustrate.
10. Write in English a sentence of not less than fifteen words and translate the same into German. Parse nouns.
11. Translate:

Der schönste Knabe muste auch den schönsten namen bekommen. Die eltern sannen einen ganzen Tag, welches in ihrer Verwandtschaft der schönste name sei und erinnerten sich eines weitläufigen Vetters Amos Haselborn. Da den protestanten damaliger zeit—es war im Jahre 1610—die alttestamentlichen namen besonders fromm und kräftig klangen, unter diesen aber "Amos" als recht auffallend fremdartig hervorleuchtete, so wählte ihn der alte Haselborn.

12. Give principal parts of all verbs.
13. Arrange in groups the nouns, adjectives, adverbs and prepositions in eleventh question.
14. Write in German not less than 100 words on "Das Pferd."
15. Parse all verbs and adjectives in 14.
16. Write in German: (a) It is a quarter past four; (b) February 22, 1901; (c) Please give me a cup of tea.
17. Name three German writers. Name one production from each.

SOLID GEOMETRY.

(Any seven.)

1. Prove that the surface of a sphere is equal to the product of its diameter by the circumference of a great circle.
2. Define ten terms used in solid geometry.
3. What is the volume of a cone whose altitude is 12½ feet and the circumference of whose base is 10 feet?
4. Draw a cylinder and illustrate terms used in describing it.
5. Prove that any triangular prism may be divided into three equal triangular pyramids.
6. Theorem: Parallel sections of a prism are equal polygons.
7. Show with an illustration how the volume of a rectangular parallelopiped is equal to the product of its base by an altitude.
8. Draw any seven figures and name them that are used in solid geometry.
9. The angles of a triangle are 70 degrees, 80 degrees and 100 degrees; find the sides of its polar.
10. The volume of a sphere is two-thirds the volume of a circumscribed cylinder of revolution.
11. If a sphere of iron weighs 999 pounds, how much would a sphere of iron of one-third the diameter weigh?

PLANE GEOMETRY.

(Any seven.)

1. Define geometry. Vertical angle. Hypothesis. Trapezoid. Segment.
2. Prove: If two parallel straight lines are cut by a third straight line, the alternate interior angles are equal.
3. Prove: Two triangles are equal, if two sides and included angle of one are equal to two sides and the included angle of the other, each to each.
4. Prove: The sum of the angles of a triangle is equal to two right angles.
5. The straight line which bisects the angle exterior to the vertical angle of an isosceles triangle is parallel to the base. Prove.
6. Prove: The tangents drawn to a circle from a point without are equal.
7. Inscribe a circle in a given triangle.
8. Prove: Two triangles are similar, if the angles of one are equal to the angles of the other.
9. Prove: The square upon the hypotenuse of a right triangle is equivalent to the sum of the square upon the other two sides.
10. Through a given point draw a tangent to a given circle, when the point is on the circumference.
11. Demonstrate: In any proportion the terms are in proportion by composition.

RHETORIC.

(Any seven.)

1. Define simile. Personification. Give an example of each.
2. Define metonymy. Interrogation. Give an example of each.
3. What is rhetoric? Diction? Punctuation?
4. Give eight principal rules for the use of capitals.
5. Point out and name the figures of speech in the following:
   (a) The waves ran mountain high.
   (b) The harbor was crowded with masts.
   (c) There is death in the cup.
   (d) The earth was laughing after the shower.
   (e) The foe retreated like a wolf untimely scared.
6. Correct, giving reasons:
   (a) He died of a slow fever aged 47 years.
   (b) He advanced up to the door.
   (c) He shot the man and broke his leg.
   (d) This is a hospital for old veteran soldiers.
7. Define argumentation.
8-9. Write a narration of 150 words, subject, "A Visit to the County Fair," or "My First Day at School."
10. Point out the difference in meaning between absolve and acquit. Use each in a sentence.
11. How does rhetoric differ from grammar?

CIVIL GOVERNMENT.

(Any seven.)

1. What are the qualifications of the President?
2. What bills must originate in the House of Representatives? Why?
3. Name four things that States are forbidden by the Constitution of the United States to do.
4. Discuss: "No soldier shall, in time of peace, be quartered in any house without the consent of the owner; nor in time of war but in the manner to be prescribed by law."
5. What is the Supreme Court? How long do the judges serve? Name three of them.
6. Name five powers granted the President by the Constitution.
7. What is the writ of habeas corpus? When may it be suspended?
8. What special powers has the Senate?
9. What is the census? Naturalization? Civil government?
10. How is an amendment made to the Constitution?
11. Tell how the President may be impeached. State the punishments in case judgment is rendered against him.

ZOÖLOGY.

(Any seven.)

1. Do you consider a knowledge of zoölogy essential to a teacher of physiology?
2. Why does a tree toad change its color? Explain. Name three other animals that in a degree do the same.

3. Would you recommend that a class in zoölogy begin study with the protozoa? Give reason for answer.
4. Define hibernation. What is the condition of the animal while hibernated?
5. What animals are lowest in the class vertebrate?
6. What are oviferous animals?
7. How may a venomous reptile always be detected?
8. To what extent do you think the surroundings affect an organism?
9. What is meant by mimicry? Give example.
10. What class of animals have an external skeleton?

GENERAL HISTORY.

(Any seven.)

1. What was the Augustan age?
2. What was Oliver Cromwell's place in history?
3. Who were Demosthenes and Cicero?
4. What brought about the Reformation?
5. How does the civilization of Greece and Rome affect us to-day?
6. Describe the Reign of Terror.
7. With what history are the following connected: "Crossing the Rubicon," the "Massacre of St. Bartholomew?"
8. Why noted: St. Helena, Austerlitz, Elba?
9. What is meant by the "Norman Conquest?"
10. Mention some history connected with the Bastile. With the tower of London.

PHYSICAL GEOGRAPHY.

(Any seven.)

1. What has caused the spheroidal form of the earth?
2. Name and give examples of each way by which heat is transferred.
3. What is the nebular theory?
4. Explain the formation of dew. Of frost.
5. What are stratified rocks? Unstratified?
6. Explain the cause of what is called "twilight."
7. What is the probable condition of the earth's interior? Give reasons for your opinion.
8. Name two great laws of the organic world.
9. Mention some of the resemblances of man to the lower animals. How does he differ most widely from them?
10. Name the important factors that influence the climate of a region.
11. What is "The Development Theory," as pertaining to vegetable and animal life?

ENGLISH LITERATURE.

(Any seven.)

1. Who was Caedmon? Caxton? Erasmus? Sir Thomas Moore?
2. What was the effect of the Norman conquest on the English tongue?
3. Enumerate the influences which led to the Elizabethan literature.

4. Who was Lord Bacon? What was the nature of his writings?
5. What play of Shakespeare is your favorite? Name four leading characters in that play.
6. Name a great poet of the fifteenth century whose work was of a religious or theological character.
7. What was the character of the writings of David Hume?
8. Name one poem written by each of the following: Robert Burns, Wordsworth, Southey, Coleridge, Goldsmith, Byron, Moore, Sir Walter Scott.
9. Give a brief sketch of Keats. Name one of his poems.
10. Contrast the poems of Robert Browning and those of Elizabeth Barrett Browning.
11. Name four celebrated English novelists, and mention one novel written by each.

BOTANY.

(Any seven.)

1. Describe the vegetable cell.
2. How is respiration accomplished in plants?
3. Describe the process of fertilization.
4. What is the relation of the matured fruit to the pistil?
5. How is the dispersion of seeds accomplished? Name five seeds that have special means of dispersion.
6. Describe the appearance of protoplasm.
7. Describe the leaf as to margin. Make drawing of different margins.
8. What is the corolla?
9. What is a biennial plant? Name half a dozen.
10. What are thorns from the point of view of morphology? Stamens? Flowers?
11. Show with a drawing the parts of the pistil.

AMERICAN LITERATURE.

(Any seven.)

1. Name four authors who were born in New England in the early part of the nineteenth century, and mention one important work of each.
2. Compare the educational advantages enjoyed by Franklin, Whittier, Irving, Cooper and Bryant.
3. In what respect does Edgar Allen Poe differ from other leading American authors? What is his best known poem?
4. Who wrote the following: The Alhambra; Scarlet Letter; The Vision of Sir Launfal; Tales of a Wayside Inn; Thanatopsis; Snow Bound?
5. Give the general influence of political conditions on American literature.
6. Name the writers of especial merit which Indiana has produced.
7. Why are the writings of James Whitcomb Riley more popular with the masses of the people than those of such poets as Bryant and Lowell?

8. Mention ten books written by American authors which you have read.
9. Contrast in a general way American with English literature, and state which you think most valuable to the student of literature.
10. Mention six late American works of fiction and three of any other character, naming the author of each.
11. Select one of those called for in above question, and give a brief synopsis of it.

PHYSICS.

(Any seven.)

1. Name four advantages derived from the use of machinery.
2. Define the universal properties of matter.
3. (a) Discuss equilibrium; (b) State two laws of the pendulum.
4. Describe the Leyden jar.
5. A luminous point is three inches from a convex lens having a focal length of five inches. Find the position of the image.
6. Explain the electric railway.
7. Find the weight of a steel shaft 5½ feet long and 5 inches in diameter. (Sp. gr. = 7.82.)
8. A trolley car going east at the rate of 12 miles per hour meets a north wind having a velocity of 25 feet per second. In what direction does the wind seem to meet the car, and with what velocity?
9. Tell the story of wireless telegraphy.
10. Describe the air pump.
11. What is absolute zero? Visual angle? Distillation?

CHEMISTRY.

(Any eight.)

1. Define element, compound.
2. What effect is produced upon water by an electric current? What may be learned from the experiment?
3. What is oxygen? Explain the process of its preparation.
4. When iron rusts, what chemical product is formed?
5. Describe the preparation of hydrogen and the reaction that takes place in preparing it.
6. Discuss water, pure, impure, chemically.
7. State laws of definite and multiple propositions. What led to their establishment?
8. How much oxygen can be made from ten grams of potassium chlorate? What will be the volume of oxygen obtained?
9. Describe the preparation and uses of chlorine.
10. What are acids, bases and salts? What relation do they bear to each other?
11. Where is nitrogen found in nature? Of what value is it?
12. What is bleaching powder? How is it made?
13. Name the different forms of carbon. To what is the difference due? For what is each form used?

14. What are the sources of carbon dioxide? Is the gas poisonous? What is its value in nature?
15. Classify the metals, and explain why they are so grouped.

Bi-Monthly Examinations, for Children in Town and District Schools.

For all the common schools of the State under the supervision of County Superintendents there is a system of examinations called "Bi-Monthly Examinations." These examinations are conducted by the teacher on the last two days of each of the three "parts" of the school year. The questions are prepared by a committee of County Superintendents, sent to the County Superintendents by the State Superintendent, and by the County Superintendents to teachers.

The questions are to be opened only in the presence of the school on the morning of the examination, by a committee of three pupils, selected on the day previous. This committee will find within the envelope a blank certificate which they will properly fill out and send to the County Superintendent.

The examinations are to be held only on the days designated on the envelope and in accordance with the rules accompanying the questions.

The papers are to be carefully graded without delay by the teacher, the grades preserved in an appropriate record, and the manuscripts placed on file in the school for inspection by the Trustee, County Superintendent and others.

The results of these examinations shall form a part of the basis for promotion.

Promotions should be based on (1) attendance, punctuality, deportment, etc., ¼; (2) bi-monthly examinations, ¼; (3) class standing, determined by (a) daily recitations, (b) written tests, reviews, etc., (c) improvement, interest, etc., ½.

Questions for the First Examination, Based on the First Part of the State Course of Study, 1901–1902.

WRITING.

Grade the penmanship on legibility (40), regularity of form (25), neatness (10), movement (10), and improvement (15).

SPELLING.

1. In each grade teacher select thirty words from the spelling work of the past two months, and have pupils spell on papers. (30 per cent.)
2. Grade each pupil on the entire examination, deducting one-half per cent. for each misspelled word. (70 per cent.)

READING.

(Lesson 9, page 17.)

First Year.

1. Pupils pronounce words at sight.
2. Have them associated with their appropriate ideas.

3. Pupils read lesson orally.
4. Pupils read lesson 5 silently.
5. Have them relate it to you.
6. Teacher place several words on blackboard, pupils read them.
7. Have them make statements about a fox, a bee, a bud, a leaf, a flower.
8. Copy lesson 14, page 22.

Second Year.

(Lesson 10.)

1. Tell the story.
2. Would it be easy for you to do the same?
3. Do you think it is right to give clothes to all poor men and women as well as to poor boys and girls?

(Lesson 17.)

4. What caused the quarrel?
5. What happened to the kittens?
6. Could they have helped this?
7. Is there a lesson in this for boys and girls? If so, what?

Third Year.

(Page 35.)

1. Why did Harry think he was poor?
2. What lesson did his uncle Ben wish to teach him?
3. Do you think Harry learned the lesson? Why?

(Page 23.)

4. What is the difference between the way you play "hide and go seek" and the way they played it?
5. Where do you think the little boy's mamma was? Why?
6. Why could the little boy play better with his grandma than with other children?
7. Write in your own words the story of "I Love You, Mother."
8. Read two stanzas to your teacher.

Fourth Year.

(Page 21.)

1. Tell the story in your own words.
2. Why did the people of Bregenz save the old stone gateway?
3. What do you call the feeling which prompted the Tyrol maid to save Bregenz?
4. Read the selection on page 11.
5. Name the important persons spoken of in this lesson.
6. Do you think Lady Clare was a noble lady? Why?
7. Why did Lord Roland marry Lady Clare after what he had learned of her? What kind of man does this show him to be?
8. Read two stanzas orally to your teacher.

Fifth Year.

(Page 106.)

1. What brave act did little Arthur do?
2. What effect did this act of little Arthur have on Tom Brown?
3. What lesson did Tom learn?
4. Read a part of the story of "Tom the Water Baby" to your teacher.
5. Who was Tom?
6. What happened while Tom slept?
7. How did Tom behave as a water baby?
8. Read a part of page 117 as you would tell it if you had witnessed Tom's adventures.

Sixth Year.

1. Read the selection on page 52 carefully.
2. Who are meant by the "Blue" and the "Gray?"
3. What contrast is shown in the expression:
   "Under the laurel, the Blue,
   Under the willow, the Gray?"
4. What feeling is plainly shown throughout the entire poem?
5. How should this poem be read, fast or slow time? Why?
6. What "deed" is meant in the last stanza? Why was it generous?
7. Give a short sketch of Alice Cary's life and name, at least, three of her poems.
8. Write a description of the picture which Miss Cary wished painted.

Seventh Year.

1. Give biography of William Cullen Bryant.
2. What is the subject matter of many of his poems?
3. What is the theme and embodiment of "To a Waterfowl?"
4. Mention three beautiful thoughts learned from Bryant.
5. What is your mental picture of Washington Irving? What was his disposition?
6. Name several of his written productions.
7. What do we gain from Rip Van Winkle?
8. Describe the schoolmaster in "Legend of Sleepy Hollow."

Eighth Year.

(Page 159.)

1. How does Hawthorne view his appointment as surveyor in the custom house at Salem? (In literary studies.) (Page 167, Fifth Reader.)
2. What is the time of this poem? Is it appropriate? Why?
3. Explain the third and fourth lines of third stanza, and first and second lines of sixth stanza of "Ring Out Wild Bells."
4. What impresses you most in the study of the "Chambered Nautilus?"
5. Why does the last stanza of "The Last Leaf" seem sad to us?

6. Who wrote the following poems: "How the Old Horse Won the Bet," the "Broomstick Train," "Idylls of the King," and "In Memoriam?"
7. What was Holmes' attitude toward disunion as shown in his poem "Union and Liberty?"

SCIENTIFIC TEMPERANCE

Fourth, Fifth and Sixth Years.

1. What is alcohol? How prepared?
2. Explain the difference between distillation and fermentation.
3. For what is alcohol useful?
4. What is the effect of alcohol on the human body if taken in small quantity? Large quantity?
5. How does it affect the nervous system?

Seventh and Eighth Years.

1. What is the composition of alcohol?
2. What is meant by a volatile substance? Inflammable? Is alcohol either or both?
3. What effect does the affinity of alcohol for water have upon the body?
4. Explain the difference between stimulant and narcotic.
5. How are they alike?

PHYSIOLOGY.

Fourth and Fifth Years.

1. Tell why food is necessary to the body.
2. How is it changed in the mouth?
3. How many temporary teeth are there? How many permanent?
4. How should we take care of the teeth?
5. What is the saliva? What are its uses?

Sixth Year.

1. What is meant by the contraction of a muscle, and what is its effect? How caused?
2. How many kinds of muscles are there? Describe each.
3. Describe the spinal column.
4. What is meant by a ball and socket joint? Pivot joint? Hinge joint? Give example of each.
5. Do all animals have skeletons?
6. What is hygiene, and why should it be studied?
7. Describe the heart.
8. State fully how the blood reaches the different parts of the body and how it is conveyed back to the heart.

Eighth Year.

1. What is meant by the term "physiology?"
2. Give a full description of a cell.
3. Describe a vertebra.
4. Into how many parts is the skull divided? Name them.
5. Name and describe the different kinds of skeletons.
6. Describe the different kinds of muscle cells, state cause of contraction, and tell what changes takes place in a contracting muscle.
7. What is the necessity of exercise, and what is the result if too excessive?
8. Describe the blood, and give form, size and origin of the blood cells.
9. Describe the nervous control of the heart.

HISTORY.

First Year.

(Any six.)

1. Where did Kablu live?
2. Tell how Kablu's house was made.
3. Why was his house built against a large rock?
4. On which side of the house was the door?
5. Why did Kablu's father wake him so early?
6. What did these people worship?
7. Tell about Kablu's church.
8. How did they make fire?

Second Year.

(Any six.)

1. Where did Darius' people come from?
2. Why did these people not stay together when they reached the plain?
3. How many leaders did they have?
4. What did these people see when they came to the first village?
5. What did Darius worship?
6. Who was Darius' friend?
7. Were there people on the plain before Darius came?
8. Why did these people tell Darius they were brothers?

Third Year.

(Any six.)

1. Name in order the boys which we have studied about.
2. In what country did Cleon live?
3. What is the name of their god?
4. Who made the statue of the Olympian Zeus?
5. Describe this statue.
6. What did Cleon have to eat on his long journey?
7. What did Cleon worship?
8. Who were the Spartan boys?

Fourth Year.

(Any six.)

1. Who was Horatius?
2. What is a trireme? Describe one.
3. What kind of passengers does the trireme carry?
4. What was the forum?
5. Who was Doxius?
6. How did we know the rank of a man in Rome?
7. How old must Horatius be before he can wear a toga?
8. What did Doxius do for Horatius?

Fifth Year.

(Any six.)

1. Who was Wulf?
2. Why did Wulf and Ella have long hair?
3. What was the eagle tree?
4. Why were the Saxon villages separated?
5. Why did the boys not stay long at the eagle tree?
6. Who was Uffen? Describe his appearance.
7. What was the Moot Court?
8. Why did the people divide the land anew at certain times?

Sixth Year.

(Any six.)

1. Why was Roger anxious to be a sailor?
2. What were the ships loaded with that came from South America?
3. Who was the first boy to hear about America?
4. What do you think of Roger's school?
5. What kind of a book did Roger read from?
6. Why did King William try to bring all the people under his control?
7. Why was Roger not contented to go to school?
8. How did Roger learn his arithmetic and geography?

Seventh Year.

(Any six.)

1. What was the New England Confederacy and what was its effect?
2. Write a brief story telling how Benjamin Franklin aided his country.
3. What was the result of Braddock's defeat?
4. What did the French and Indian war settle?
5. What was the condition of the thirteen colonies in 1763?
6. Why did the king propose to tax the colonies?
7. What were the chief causes of the Revolutionary War?
8. Why was Samuel Adams called the "Father of the Revolution?"

Eighth Year.

(Any six.)

1. Tell what you can about the articles of confederation.
2. What effect had the purchase of Louisiana upon the later history of the United States?
3. Tell how slavery divided the country in regard to occupation and trade.
4. What was Jefferson's rule about removal of government officers? Was it a good rule?
5. Why did President Jackson put a stop to the United States bank in 1832?
6. What is meant by nullification and State sovereignity?
7. Tell what you can about Daniel Webster.
8. What effect had the panic of 1837 upon the United States?

ARITHMETIC.

First Year.

1. Draw a figure bounded by four lines.
2. How many pints in two quarts?
3. Write your age.
4. How many pupils in a class that has two boys and two girls?
5. What will it cost to buy a penny pencil and a two-cent tablet?

Second Year.

1. Put together all the three numbers to make 11.
2. ½ of 11=? (Picture.)
3. 11—9+6=?
4. ½ of 6×3+2=?
5. How many pints in 12 gills?
6. There are 12 boys in first year and ⅓ as many girls. How many all together?
7. ¼ of 12+⅓ of 12?
8. A man has 12 bushels of apples and sells ⅛ of them at $1.00 a bushel. How much will he get? How many bushels will he have left?
9. 3×4+1=? (Picture.)
10. John's age is twice his brother's. His brother is 6½ years old. How old is John?

Third Year.

1. At 2c a yard, how many yards of fancy paper can you buy for 23c?
2. Count 36 by 3's.
3. Make a problem for 40 divided by 5.
4. How many dimes in $2.00?
5. ⅓ of an apple + 3/6 of an apple are how many sixths?
6. 3×7+6×4—8×3=?
7. 27 feet is three times the length of a ladder. How long is the ladder?
8. Add: 6+2+9+5+6+7+9.
9. Add: 12+25+36+17+28.
10. Subtract: 42—13.

Fourth Year.

1. 60=how many 5's? 6's?
2. ⅔ are how many ninths?
3. Add ⅙ of 60 to ⅛ of 48.
4. Add: 618+379+933+632+335+492+893+232.
5. Bought a horse, buggy and harness for $300. The harness cost $25, the buggy $125. How much was paid for the horse?
6. A man born in 1875 is how old now?
7. A man having 64 bushels of potatoes sold ⅛ to his neighbor, ⅛ to the grocer, and had how many left?
8. Multiply 179 by 3.
9. A grocer bought 50 barrels of apples and 100 boxes of peaches, for which he paid $225. If the peaches cost $75, how much did he pay for each barrel of apples?
10. How many years since the War of 1812?

Fifth Year.

1. Define greatest common divisor. Least common multiple.
2. Find the great common divisor of 126 and 264. Explain process.
3. How many pairs of shoes at $3.00 a pair must be given in exchange for 30 bushels of potatoes at 50c per bushel?
4. Define fraction. Improper fraction. Mixed number. Give example of each.
5. Reduce 338/2310 to its lowest terms.
6. Subtract 18¾ from 36⅓.
7. Multiply 6/7 by 19/30.
8. Divide 6/7 by 19/30.
9. A man owning 5/6 of a mill sells 3/7 of his share. What part does he still own?
10. What will 10½ pounds of sugar cost at 4½c a pound?

Sixth Year.

1. Define arithmetic, unit, and number.
2. Write: Eighty-six trillion one million twenty-four.
3. .0863+.2483+.005+.0148=?
4. Add: 8685+4944+5636+9483+7521+2754+4856+7039.
5. Enumerate: 6390086133859016.
6. 12—5×2+30÷5×3=?
7. When is a number divisible by 3? By 4?
8. Cancel: (140×169×510)/(39×68).
9. Write prime factors of 46410.
10. What is the cost of 324 tablets at 8⅓c each?

Seventh Year.

1. What is the interest on $135.00 for 4 years 6 months at 8 per cent.?
2. Find 10-11 of 867. .625 per cent. of 896.24.
3. ¾ is what per cent. of 7-12?
4. Sold a farm for $12,860.00. 2-5 of this amount is 50 per cent. of the cost of the farm. The gain per cent. is how much?

5. How many loads of gravel containing 125 per cent. of a cubic yard can be taken from a pit 80 feet long, 40 feet wide and 10 feet deep?
6. What is the cost of an article which is sold for $279.00, after a deduction of 10 per cent. from the marked price, it having been marked to gain 20 per cent.?
7. 3071 is the product of three numbers. Two of them are 83 and 74. What is the other?
8. The windows of your schoolroom are what per cent. of the walls? Teacher give figures.
9. Change 7-13 to a three-place decimal.
10. A pile of wood 12 feet high, 8 feet wide and 56 feet long is 33⅓ per cent. of how many cords?

Eighth Year.

1. Define exponent. Evolution. Involution.
2. If 240 panes of glass 18 inches long, 10 inches wide, glaze a house, how many panes 16 inches long by 12 inches wide will glaze six such houses?
3. A has a lot worth $8,000.00, good notes $2,500.00, and cash $1,500.00. His debts are $20,000.00. What can he pay on the dollar?
4. Find the square root of 466,489. Give you work in full.
5. A boat in crossing a river 500 yards wide drifted with the current 360 yards. How far did it go?
6. Find the cube root of 34,328,125.
7. How many more cubic feet in a sphere whose diameter is ten feet than in one whose diameter is five feet?
8. What is the area of a field whose parallel sides are 60 and 80 rods long, respectively, and 30 rods apart?
9. Find the number of cubic feet in a log 48 feet long, diameter of lower end 36 inches, of upper end 24 inches.
10. A cow is tethered by a 40-foot rope to the corner of a barn 20x30. Over how much ground can she graze?

GRAMMAR.

Second Year.

1. Write six things about the cow.
2. Write six things about the squirrel.
3. Relate a story about your pet.

Third Year.

1. Write a statement and tell two facts about it.
2. Write a question and tell two facts about it.
3. Write full names of five of your friends.
4. Write two sentences, one using the word "I" and the initials of your name.
5. The teacher may have the pupils write a description upon some object found in the schoolroom.

Fourth Year.

1. What are the parts of a sentence?
2. Give rules and examples of five kinds of words which should begin with capital letters.
3. Write sentences containing two different kinds of nouns.
4. Tell what you know about singular and plural forms of nouns.
5. Write the plural forms of these words: flag, box, loaf, city, valley and man.

Fifth Year.

1. What is a preposition? Write two sentences, each containing a preposition.
2. Use "I," "him" and "her" in sentences.
3. What are words that connect called? Write two sentences, each containing a connecting word.
4. Write a sentence containing an adjective and an adverb.
5. Name all the parts of speech you have learned.

Sixth Year.

1. Classify sentences as to use and give examples of each.
2. Name the essential elements of the sentence.
3. What is a thought?
4. What is meant by grammatical and logical subject and predicate?
5. Write five rules for capital letters, and illustrate.
6. Name five marks of punctuation and use sentences illustrating each.
7. Write a composition on some subject selected by the teacher.

Seventh Year.

1. Compare good and rich and use each degree in sentences.
2. Write sentences showing correct use of "a," "an" and "the."
3. Use the word "dream" and "whip" both as transitive and intransitive verbs in both active and passive voice.
4. Write one form of "run" in each mode.
5. Use "to talk" as a noun, adjective and adverb.
6. Parse "running" in the following sentences:
   (a) "Running" water does not stagnate.
   (b) The girl "running" tripped over the rope.
   (c) The deer came "running" down the hill.
   (d) He desired "running" the race himself.

Eighth Year.

1. Give sentence showing how many ways a noun may be in the absolute case.
2. Classify the noun; the pronoun.
3. Use "that" as an adjective and a relative pronoun.
4. Write sentences showing the attribute, appositive and predicate use of adjectives.

5. Give the construction of italicized words in following sentences:
   (a) *Mr. Jones*, the *banker*, desired his *son* to be a *lawyer*.
   (b) *Mr. Smith's house* was a modern *building*.
   (c) The *sun* having risen, *James* hastened *home*.

NATURE STUDY.

First Year.

1. Name four fruits that you like.
2. Draw an oak leaf.
3. What kind of foot has a cat? A dog? A horse? Why?
4. With which hand do you write?
5. In what direction does the sun set?
6. Was there dew, frost or fog this morning?

Second Year.

1. Where do these grow: Apple, grape, potato?
2. Draw a beech leaf.
3. Where do these animals live: Cat, bee, grasshopper?
4. Why does the bear have a coat of fur?
5. What can we learn about a bird with our eyes? What with our ears?
6. From what direction did the wind blow this morning?

Third Year.

1. Make drawings to show four kinds of leaves that you have seen.
2. How does an oak and cedar differ?
3. What covering have these animals: Fish, bird, frog?
4. Why should we bathe often?
5. Name a vegetable, a grain, a fruit, that are good to eat.
6. How does a tree change when winter comes?

Fourth Year.

1. Name two kinds of leaves that are useful to us.
2. Name four plants whose roots we use.
3. Of what use are plants to animals?
4. Name an animal that lives on each of the following: Grass, leaves, roots, nuts, insects.
5. What two uses has the tongue?
6. What is the difference between dew and frost?

Fifth Year.

1. How does the stem of the peach and apple differ?
2. Name two uses of the bones.
3. Make a drawing of two kinds of joints.
4. How may we strengthen our muscles?
5. How will the use of alcohol affect our stomachs?
6. Why does the north wind seldom bring rain?

MUSIC.

First, Second and Third Years.

Grade the pupils on their class work.

Fourth, Fifth and Sixth Years.

1. Test pupil's ability to sing the intervals from 1 to 8.
2. Draw the scale. Place the syllable name on it.
3. Draw a "whole note," a "half note," a "quarter note."
4. What is the use of the clef? Draw a clef.
5. Write the names of the following notes: 1, 8, 6, 8, 4, 2, 1, 3, 5, 4, 7.

Seventh and Eighth Years.

1. Draw a staff and locate on it the following notes, using the key of "G:" 1, 2, 3, 4, 5, 6, 7, 8.
2. Give three attributes of tones. Define each.
3. What is the use of the "natural?"
4. Explain fully how to represent the attributes of tones.
5. How can you tell the key in which a piece is written?

GEOGRAPHY.

First and Second Years.

Teacher make oral test from work gone over.

Third Year.

1. What is a slope? What kind of slopes have you seen?
2. Name the different kinds of soil that you have seen. Which is the most beneficial to man?
3. Tell all you can about what the rills, brooks and rivers do to the land. Where have you seen such work done?
4. Of what benefit is rain?
5. What kind of a bottom has a pond? Why? A swift-running brook? Why?
6. Name all the uses of water that you can think of.
7. Why does a brook flow in a crooked line instead of a straight line?
8. How can you tell which way the land slopes?

Fourth Year.

1. What is the axis of the earth? The equator?
2. What is the world ridge?
3. Describe the slopes from the world ridge.
4. Describe the highland of Brazil. What important article is raised there?
5. Where in North America are the prairies found? Describe them as they are in summer and winter.

6. Give all the uses of the bamboo that you can.
7. Describe the surface of Europe.
8. Tell all you can of the Nile valley.

Fifth Year.

1. What is geography?
2. Where is the soil the deepest? Why?
3. What is ground water? A spring?
4. What is a river system? A river basin? A divide?
5. What industry is aided by an irregular coast line? Why?
6. Describe fully the cause of day and night.
7. Why do we have different heat belts?
8. What causes rainfall?

Sixth Year.

1. Where were the first settlements of North America made? Why?
2. Which part of the Mississippi basin is the most thickly settled? Why?
3. Sketch a map of the United States and indicate the parts in which the following are found: Cotton, wheat, corn, oats, tobacco, forests, hogs, cattle, sheep, coal, iron, gas, gold and silver.
4. Why are the farm products named above found in the regions which you have indicated?

Seventh Year.

1. In what heat belts does Asia lie?
2. What of the rainfall of the Central Basin of Asia? Why is it so?
3. Where are most of the towns built in this region? Why?
4. If you were to make a journey from southern India northward to the Arctic ocean, what products would you see? Why?
5. What are the principal products of China, India, Japan, Arabia, and the Philippines?
6. Name and locate a leading city in each of the above.

Committee on Bi-Monthly Questions for 1901-1902.—E. H. Andrews, Miami, Chairman; George W. Ellis, Elkhart; George H. Tapy, Whitley; Robert C. Hillis, Cass; H. D. Shideler, Huntington; Irvin Brandyberry, Adams; C. A. Zeigler, Laporte; Louis H. Hamilton, Jasper; E. E. Robey, Howard.

4. Licenses.

(a) PROFESSIONAL AND LIFE STATE CERTIFICATES.

The records preserved in the State Department of Public Instruction show that Professional* and Life State Certificates have been granted to the following persons:

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Adamson, Enos	Middletown	First grade	1872
Atkinson, C. S.	Farmland	First grade	1874
Allen, Alice O.	Greencastle	First grade	1875
Aley, R. J.	Spencer	Life State	1885
Allen, Hamlet	Washington	Life State	1885
Allen, P. A.	Bluffton	Life State	1885
Almond, W. S.	Vernon	Life State	1889
Allen, Basil L.	Linton	Professional	1890
Albertson, Ida E.	Plainfield	Life State	1891
Almond, W. T.	Vernon	Life State	1888
Ayres, Burt W.	Dunkirk	Professional	1893
Ayres, Burt W.	Upland	Life State	1901
Ashby, Jno. M.	Tipton	Professional	1895
Axtell, W. F.	Washington	Life State	1886
Addleman, Frank E.	Lynn	Professional	1897
Aldrich, Helen F.	Port Huron, Mich.	Life St. in com'n sch. branches. Countersigned from Mich.	1899
Aldrich, Susie May	Zionsville	Life State from Mich.	1902
Arnold, K. O.	Marion	Life. Countersigned from Michigan	1899
Augstman, Clydia Mae	Ft. Wayne	Life State from Mich.	1902
Avery, Lawrence G.	Buchanan, Mich.	Life State from Mich.	1901
Abbey, Evangeline V.	Blanchard, Mich.	Life State from Mich.	1902
Bell, Wm. A.	Indianapolis	First grade	1867
Bourgeois, Alex	Evansville	Second grade	1872
Brown, Geo. P.	Indianapolis	First grade	1872
Banta, W. H.	Valparaiso	First grade	1872
Bass, Geo. F.	Noblesville	Second grade	1872
Button, Wm. J.	Indianapolis	First grade	1873
Buchanan, Jacob	Whitesville	Second grade	1873

*Professional certificates expire eight years after date of issue.

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Brown, Jesse H.	Indianapolis	First grade	1873
Blackburn, J. A.	Lafayette	First grade	1873
Berry, Peter A.	Logansport	First grade	1873
Bobbitt, John H.	Greensburg	First grade	1873
Bond, Daniel	Lynn	First grade	1873
Bachelder, J. M. P.	Kendallville	First grade	1873
Bullivant, W. S.	Boonville	Second grade	1874
Brown, Alice E.	Lafayette	Life State	1884
Byers, Lizzie S.	Terre Haute	Professional	1887
Byers, William W.	Terre Haute	Professional	1887
Barnes, J. W.	Kokomo	Life State	1885
Bogue, B. J.	Lagrange	Life State	1885
Boone, R. G.	Frankfort	Life State	1885
Boltz, Elias	Mishawaka	Professional	1886
Butcher, J. W. D.	New Albany	Life State	1886
Baldwin, A. L.	East Germantown	Life State	1889
Best, Mary E.	Angola	Life State	1889
Barber, A. H.	Walkerton	Professional	1890
Barr, William F.	Milroy	Professional	1890
Bailey, W. O.	Angola	Life State	1891
Beam, W. A.	Leesburg	Professional	1891
Barnes, J. A.	Waterloo	First grade	1875
Bass, George F.	Indianapolis	First grade	1876
Bisbee, Maria	Evansville	Second grade	1876
Bernhart, W. C.	Columbia City	First grade	1882
Baylor, Adelaide	Wabash	Life State	1887
Belman, W. C.	Hammond	Life State	1887
Bowers, H. W.	Winchester	Life State	1886
Baldwin, A. L.	East Germantown	Life State	1889
Best, Mary E.	Angola	Life State	1889
Boltz, Elias	Dunkirk	Life State	1894
Bryant, James C.	Irvington	Professional	1895
Bryant, James C.	Irvington	Life State	1896
Brubeck, Frank		Professional	1896
Beldon, Alfred H.	Frankton	Professional	1897
Bowers, W. O.	Tabor	Life State	1897
Bunnell, Clark	Wanatah	Professional	1897
Briscoe, George A.	New Albany	Professional	1898
Broughton, Elton	Rome City	Professional	1898
Brown, Henry G.	Angola	Professional	1898
Boyd, T. S.		Life in com. branches. Countersigned from Pennsylvania	1899
Bell, Leslie R.		Life. Countersigned from New York	1899
Brady, C. A.		Life in com. branches. Countersigned from Pennsylvania	1899
Boldt, Joseph C.	Corydon	Professional	1899

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Brown, Henry G.		Life	1899
Byrket, William F.	New Castle	Professional	1899
Brockman, Robt. M.		Life State. Countersigned from Neb.	1899
Barton, Esther E.		Life State. Countersigned from Ohio	1900
Beane, Wm. A.	South Whitley	Professional	1900
Boldt, Joseph C.	Anderson	Life State	1901
Bean, Harry Redford	Galveston	Life State for common branches. Countersigned from Ontario.	1901
Batchelder, Sophia Esteile.	Angola	Life State. Countersigned from Mich.	1902
Bossert, Michael	New Trenton	Professional	1902
Brock, Clark D.	Valparaiso	Professional	1902
Bradt, Hale	Bloomington	Life State	1902
Charles, Thomas	Indianapolis	First grade	1867
Clement, A. A.	Sullivan	First grade	1867
Cooper, John	Winchester	First grade	1872
Chase, R. A.	Plymouth	First grade	1872
Clodfelter, M. E.	Waveland	Second grade	1872
Compton, Susie M.	Lafayette	First grade	1873
Crane, S. D.	Middlebury	First grade	1873
Casper, Elias T.	Lagrange	First grade	1876
Clark, E. A.	Evansville	First grade	1884
Charlton, O. C.	Lebanon	Life State	1885
Clarke, C. E.	Boonville	Life State	1886
Cragun, S. N.	Lebanon	Professional	1886
Churchill, F. D.	Aurora	Professional	1887
Collins, Rosalie A.	Evansville	Professional	1887
Clark, L. D.	Carthage	Professional	1888
Cox, Morris E.	Westfield	Life State	1888
Carroll, Margaret A.	Crawfordsville	Professional	1889
Chandler, Emma R.	Goshen	Life State	1889
Convoy, S. W.	Vernon	Life State	1889
Carr, John W.	Muncie	Life State	1890
Cory, Wm. L.	New Cumberland	Professional	1890
Conn, U. S.	Valparaiso	Professional	1891
Crecraft, A. N.	Brookville	Life State	1887
Caldwell, F. S.	Winchester	Life State	1886
Cameron, W. F.	South Bend	Life State	1886
Chamberlain, L. C.	Pennville	Life State	1886
Coe, H. E.	Auburn	Professional	1892
Carroll, John H.	Leavenworth	Professional	1894
Cory, Virginia G.	Dunreith	Professional	1895
Cory, Virginia G.	Dunreith	Life State	1896
Crider, E. C.	Buck Creek	Professional	1896
Caswell, Omar	Eby	Professional	1894

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Campbell, John M.	Frankfort	Professional	1897
Carroll, John H.	Grandview	Life State	1897
Charles, Herbert	Economy	Professional	1897
Cooper, Homer H.	Knightstown	Life State	1897
Clark, J. Harlan	W. Lafayette	Professional	1898
Coe, Henry E.	Auburn	Life State	1898
Collins, A. J.	Angola	Professional	1898
Clark, James H.	Columbus	Life. Countersigned from Georgia	1899
Coffeen, Olive E.		Life. Countersigned from Illinois	1899
Cato, Austin G.	Oakland City	Professional	1899
Cole, Geo. C.	Lawrenceburg	Professional	1899
Crider, E. C.	Lafayette	Life State	1899
Chambers, Charles	New Castle	Professional	1899
Copeland, Chas. H.	Stewart, Ohio	Professional	1900
Curtis, Wilbur R.	Hobart		
Cotton, Sarah E.	Indianapolis	Life. Countersigned from California	1900
Cato, A. G.	Oakland City	Life State	1901
Curtis, Wilbur R.	Hobart	Life State	1901
Cushman, W. J.	Lyons	Life State	1901
Coffin, Cyrus W.	Carthage	Life State	1901
Coyle, Gertrude E.		Life State. Countersigned from Pa.	1901
Cowgill, Paul A.	Michigan City	Life State. Countersigned from Mich.	1901
Childs, Lelia M.	Michigan City	Life State. Countersigned from Mich.	1901
Crane, Katharine A.	Laporte	Life State. Countersigned from Mich.	1902
Cole, Leonard	Lawrenceburg	Professional	1902
Clifford, John F.	Connersville	Life State	1902
Carr, Bessie	Michigan City	Life State. Countersigned from Mich.	1901
Davis, Ferman	Anderson	First grade	1874
Driggs, Rhoda		First grade	1871
Davidson, J. W.	Evansville	First grade	1873
Dunn, Temple H.	Alton	First grade	1874
Driggs, Emily	Evansville	Second grade	1882
Dipboye, A. J.	Peru	Life State	1885
Dickens, John C.	Rensselaer	Life State	1890
Dillon, A. J.	Rochester	Life State	1890
Day, Philmer	Vincennes	Life State	1891
Dick, Mary E.	Ft. Wayne	Life State	1885
Dushane, James	South Bend	Life State	1887
Douglas, A. H.	Logansport	Life State	1885
Dewey, Fred N.	Lagrange	Professional	1889

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Dungan, C. A.	Decatur	Professional	1889
Dunkle, A. W.	Delphi	Professional	1889
Deming, Janie	Shelbyville	Life State	1894
Dixon, J. L.	Elizabethtown	Professional	1894
Drybread, Chas. H.	Anderson	Professional	1895
Danglade, Ernest	Vevay	Life State	1897
Delaney, Faustin S.	Wilberforce, Ohio	Professional	1897
DeArmitt, James B.	Huntington	Professional	1899
Deist, Henry C.	Goodland	Professional	1899
Deputy, Manfred W.	Vernon	Professional	1899
Doane, Charlotte	Jasper	Professional	1899
Doerr, Louis P.	Jeffersonville	Professional	1899
Davis, Joseph L.	Valparaiso	Professional	1900
DeHuff, John D.	Peru	Professional	1900
Dodson, Edwin C.	Dana	Professional	1900
Deputy, Manfred W.	Vernon	Life State	1900
Doyer, Agnes		Life State. Countersigned from Penn.	1901
Eppert, E. P.	Brazil	First grade	1873
Evry, Hannah E.	Irving Pl., Chicago.	First grade	1882
Ellis, Flora	Painbridge	Life State	1885
Everman, B. W.	Camden	Life State	1885
Elson, W. H.	Terre Haute	Professional	1886
Ells, Elvira H.	Evansville	Professional	1887
Ewing, Tilla G.	Crawfordsville	Professional	1889
Ellison, David H.	Mitchell	Life State	1886
Ellis, Horace	North Vernon	Professional	1894
Ellis, Horace	North Vernon	Life State	1895
Evans, Harry	West Lebanon	Professional	1897
Ewington, Alfred		Life. Countersigned from Illinois	1899
Evans, Harry	West Lebanon	Life	1900
Earle, John W.	Wanaka	Professional	1901
Earhart, Will	Richmond	Life State in Music. Countersigned from Ohio	1901
Funk, Sue M.	Elizabeth	First grade	1872
Funk, J. P.	Mitchell	First grade	1872
Fuller, M. Alice	Laporte	Second grade	1873
Fertich, W. H.	Muncie	Second grade	1874
Fuller, W. W.	Boonville	Life State	1885
Fouts, Livi N.	Remington	Life State	1886
Felt, E. W.	Greenfield	Professional	1887
Fielding, Josephine	Warsaw	Professional	1888
French Lillian D.	Ft. Wayne	Life State	1887
Feldman, George G.	Valparaiso	Life State	1892
Freeman, Daniel	Richmond	Professional	1894

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Fish, George R.	Rochester	Professional	1897
French, James D.	Whiting	Professional	1897
Fouse, William H.	Corydon	Professional	1898
Ferner, Carl M.	Whitehall, Mich.	Life. Countersigned from Michigan.	1899
Fox, Willis A.	Albion	Professional	1899
Ferner, Rose C.	Huntington	Professional	1899
Fleming, James L.	Benton	Professional	1900
French, J. D.	Millington, Ill.	Life State. Countersigned	1901
Good, Isaac M.	Hagerstown	First grade	1873
Gifford, W. D.	Lafayette	Second grade	1873
Goodale, Susan A.	Clear Creek	Second grade	1874
Gable, Samuel M.	York, Pa.	Second grade	1874
Gross, J. M.	New Carlisle	Life State	1885
Goodwine, Fremont	West Lebanon	Professional	1886
Gregg, John C.	Brazil	Life State	1887
Glascock, Will H.	Greenfield	Life State	1886
Geiger, Finley	Pennville	Professional	1890
Goss, David K.	Rochester	Life State	1888
Gallimore, H. F.	Kempton	Professional	1892
Greathouse, Chas. A.	Mt. Vernon	Professional	1895
Gray, Frank D.	Fremont	Life State	1896
Greenstreet, J. A.	New Castle	Life State	1896
Gardner, Claribel	Lotus	Professional	1897
Gardner, Edward	Lotus	Professional	1897
Gause, Frank A.	Bloomington	Professional	1897
Geiger, Finley	Hartford City	Life State	1897
Grover, James H.	Frankfort	Professional	1898
Gooden, Wm. T.		Life. Countersigned from Illinois	1899
Guy, Geo. L.		Life. Countersigned from Illinois	
Gower, John B.	Otis	Professional	1899
Gregor, Benjamin	Michigan City	Life State. Countersigned from Mich.	1901
Gillespie, Grace E.	Michigan City	Life State. Countersigned from Mich.	1902
Hewitt, Charles	Knightstown		1867
Housekeeper, J. C.	Rockville		1869
Hodson, J. M.	Plainfield		1869
Hunter, D. E.	Princeton	First grade	1872
Hodge, C. P.	Warsaw	First grade	1872
Hodgin, Cyrus	Richmond	First grade	1872
Hanley, John M.	Indianapolis	First grade	1871
Hufford, Lois G.	New Castle	First grade	1874
Hufford, Geo. W.	New Castle	First grade	1874

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Harmon, Sarah D.	Ft. Wayne	First grade	1875
Hinkle, C. C.	Rockport	First grade	1882
Harding, G. L.	Leesburg	Life State	1885
Hoffman, W. F.	Washington	Professional	1885
Harrison, M. W.	Auburn	Life State	1885
Harrison, B. B.	Auburn	Life State	1885
Howard, S. E.	Spencer	Life State	1885
Hays, James H.	Connersville	Life State	1885
Henry, James H.	Martinsville		1885
Hadley, L. H.	Rockville	Professional	1886
Hanan, John W.	Lagrange	Life State	1886
Harris, Lee O.	Greenfield	Professional	1887
Hart, James R.	Thorntown	Life State	1886
Hinkle, M. H.	Rockville	Professional	1886
Huff, Aquila Colfax	Rockport	Life State	1886
Haines, John F.	Sheridan	Life State	1887
Harris, T. L.	Sheridan	Professional	1887
Haynes, E. A.	Kirkland	Professional	1887
Hamilton, Maggie	New Albany	Professional	1888
Harter, Mary E.	Huntington	Professional	1888
Harris, Francis L.	Roanoke	Life State	1889
Harris, Thos. L.	Sheridan	Life State	1889
Harvey, John	Rockville	Professional	1889
Huntington, Theodore	Cicero	Professional	1889
Hardesty, A. R.	Chesterton	Professional	1890
Harry, S. A. D.	Covington	Life State	1890
Hart, Will P.	Osgood	Professional	1890
Hottel, Craven L.	Milton	Life State	1890
Hill, Miriam P.	Cambridge City	Professional	1888
Hood, James F.	Marion	Professional	1892
Hanna, U. S.	New Castle	Professional	1892
Hawkins, G. A.	Hebron	Professional	1892
Haggett, George B.	New Albany	Life State	1893
Hanna, U. S.	New Castle	Life State	1893
Harvey, John	Rockville	Life State	1893
Hostetter, F. F.	Otwell	Professional	1893
Hayworth, J. H.	Edinburg	Life State	1894
Hardesty, A. R.	Chesterton	Life State	1895
Heighway, F. F.	Lowell	Life State	1895
Hamilton, W. A.	Hebron	Life State	1897
Hanson, Samuel C.	Williamsport	Professional	1897
Hiatt, Amos L.	Kirklin	Professional	1897
Hamilton, Lewis H.	Rensselaer	Professional	1898
Harsh, William E.	Avilla	Life State	1898
Herrington, F. A.	Hebron	Professional	1898
Hoke, G. M.	Garrett	Life State	1898
Heiny, Wm. M.		Life. Countersigned from Washington	1899

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Hartman, Henry A.		Life. Countersigned from Ohio	1899
Hamilton, Louis H.	Rensselaer	Life	1899
Hodges, C. C.	Crothersville	Countersigned from Iowa	1900
Hall, John C.	Whiting	Countersigned from Illinois	1900
Heightower, G. F.	West Franklin	Professional	1900
Holliday, Winfred W.	Bloomington	Professional	1900
Hufferd, Lot Adams	Mays	Professional	1900
Hall, Sylvester H.	Bloomington	Life	1900
Hughart, A. A.	Valparaiso	Life	1900
Herrington, Fred A.		Life State. Countersigned from Mich.	1901
Hallett, Edwin S.	Corydon	Professional	1901
Hill, William A.	Hammond	Professional	1901
Hufford, Lot A.	Mays	Life State	1901
Hammond, Elizabeth	Ft. Wayne	Life State. Countersigned from Pa.	1901
Hough, Lena Lucretia	Michigan City	Life State. Countersigned from Mich.	1902
Holliday, W. W.	Upland	Life State	1902
Hamilton, I. C.	Zanesville	Life State	1902
Jones, Mariah	Indianapolis	First grade	1871
Johnson, J. B.	Indianapolis	First grade	1872
James, John B.	New Albany	First grade	1873
Jones, John W.	Muncie	Second grade	1873
Jones, A. W.	Poolsville	First grade	1874
James, John B.	New Albany	First grade	1876
Jones, Robert E.	Zionsville	First grade	1876
Johnson, A. J.	Carthage	Second grade	1881
Johnson, N. C.	Oakland City	Life State	1885
Jakways, W. B.	New Carlisle	Professional	1889
Jay, J. W.	McCordsville	Professional	1893
Jakways, W. B.	New Carlisle	Life State	1898
Johnson, Rose	Clinton	Life in com. branches. Countersigned from Kansas	1899
Johnson, Elizabeth	Emporia, Kan.	Life in com. branches. Countersigned from Kansas	1899
Jeffrey, James H.	Laporte	Life	1900
Johnson, Hugh E.	Oaklandon	Professional	1901
Kneff, Susan F.	Derker Station	Second grade	1874
Kohler, Harrison	Frankfort	First grade	1874
Kneff, Susan F.	Red Cloud	First grade	1876
Kennedy, Anna S.	Franklin	First grade	1876
Knibbe, J. A.	Kendallville	First grade	1882

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Kennedy, A. H.	Rockport	Life State	1885
Kinzie, Titus E.	Hagerstown	Professional	1889
Kirtland, Ella E.	Huntington	Life State	1891
Kinzie, T. E.	New Carlisle	Life State	1896
Kimmel, Chas. W.	Kendallville	Life State	1897
Kyger, Samuel P.	Frankfort	Professional	1897
Kennaston, G. F.	Crawfordsville	Life. Countersigned from Minnesota	1899
Kauffman, C. H.	Decatur	Life. Countersigned from Pa.	1899
Kingsbury, Grace	Evansville	Life. Countersigned from Wis.	1902
Kahl, Edwin	New Albany	Life State	1902
Luke, D. B.	Goshen	First grade	1872
Little, L. D.	Indianapolis	Second grade	1874
Lawrence, Amos O.	Danville	First grade	1874
Link, Wm. H.	Boonville	First grade	1876
Lemaster, J. B.	Franklin	Life State	1885
Leib, C. M.	Lagrange	Life State	1887
Lingenfelder, Walter	Hanna	Life State	1888
Long, Geo. E.	Frankfort	Life State	1888
Lough, Mattie E.	Lebanon	Professional	1889
Lucas, Harvey	Patoka	Professional	1889
Lydy, John W.	Frankfort	Professional	1890
Luzzadder, Sophia	Sullivan	Life State	1886
Little, L. P.	Covington	Professional	1892
Linam, Allie	Leesburg	Professional	1892
Loring, H. H.	Valparaiso	Life State	1892
Legler, Hugo	Evansville	Life State	1892
Leonard, Z. B.	Bloomington	Life State	1893
Linam, Allie	Leesburg	Life State	1893
Lawrence, E. W.	Knightstown	Professional	1898
Luse, Leonard M.	Indianapolis	Professional	1898
Lydy, John W.	Kirklin	Life State	1898
Long, Frank B.	Franklin	Professional	1899
Lybrook, Charles R.	Young America	Professional	1899
Loomis, E. C.	Perrysville	Life. Countersigned from Michigan	1899
Larrabee, Frank	New Palestine	Professional	1900
Lawrence, R. S.	Hanover	Life State. Countersigned from Kan.	1901
Long, Frank B.	Kirklin	Life State	1901
Lovett, Geo. A.	Hebron	Professional	1901
Long, George E.	Mulberry	Life State	1901
Lyons, Kate	Marion	Life State. Countersigned from Col.	1902
Large, James M.	Mt. Etna	Life State	1902
Lewis, John W.	Wabash	Professional	1902

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
McRae, H. S.	Muncie	First grade	1867
McConaber, H. J.	Goshen	First grade	
McRae, Mrs. E. M.	Muncie	First grade	1872
McCullough, Miss M.	Bloomington	First grade	1872
McCord, Sarah A.	Martinsville	First grade	1872
Mather, J. P.	Dublin	Second grade	1881
Mushlitz, W. H.	Frankfort	Second grade	1882
McClure, C. W.	Mitchell	Life State	1885
Merrill, S. J.	Fairfield	Life State	1885
Miller, H. H.	Bremen	Life State	1885
Mallery, M. J.	Danville	Professional	1886
Myers, John N.	Wabash	Life State	1887
Maaten, Klaas V.	Portland	Professional	1887
Marble, Fannie	Valparaiso	Professional	1887
McKinsey, U. B.	Noblesville	Professional	1887
Mills, Isaac F.	Wabash	First grade	1872
Mayhew, Dora J.		First grade	1871
Moore, Charles V.	Crawfordsville	First grade	1873
Mowry, David	Goshen	Second grade	1875
Mohler, A. D.	Lagrange	First grade	1876
Madden, J. H.	Bedford	First grade	1876
Madden, Mrs. J. H.	Bedford	Second grade	1876
Motsinger, N. H.	McCordsville	Second grade	1876
Martin, J. V.	Greenfield	Professional	1886
Mott, T. A.	Richmond	Life State	1886
Munson, Eliza E.	Mitchell	Life State	1886
Marble, Fannie	Dayton, Mich.	Professional	1888
Meyer, F. J. L.	South Bend	Life State	1888
Mallery, M. J.	Crown Point	Life State	1889
Manlove, Eva	Dana	Life State	1889
Markley, Mrs. Frances	Wabash	Professional	1889
Merica, F. M.	Garrett	Professional	1889
Marble, Fannie	South Bend	Life State	1890
Martin, Albert J.	Logansport	Professional	1890
Mitchell, James A.	Arcadia	Professional	1890
Murphy, Wm. R.	North Judson	Professional	1890
Methley, Chas	Leo	Professional	1892
Moffett, Alonzo D.	Spencer	Life State	1886
Martin, Andrew	Akron	Professional	1893
Martin, A. J.	Logansport	Life State	1894
McCord, L. E.	Peru	Professional	1895
Monroe, Edwin S.	Mt. Vernon	Life State	1895
Miller, E. S.	Chesterton	Professional	1896
Miller, Geo. W.	Kokomo	Life State	1896
McDaniel, C. M.	Madison	Professional	1896
Martin, A. E.	Indianapolis	Life State	1897
Martin, Jacob	Plymouth	Professional	1897
Mitchell, John J.	Frankfort	Professional	1897

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Moore, C. Bell	Lawrenceburg	Professional	1897
Morgan, Wilbur F.	Ambia	Professional	1897
Mortsolf, J. Benjamin	Frankfort	Professional	1897
Mowrer, Frank K.	Warren	Professional	1897
Murphy, W. R.	Remington	Professional	1898
Marble, Stella Mae		Life in com. branches. Countersigned from Michigan	1899
Monroe, J. G.		Life State. Countersigned from Mich.	1899
Mahaffey, Arthur M.	Hartsville	Professional	1899
Murphy, Wm. P.	Remington	Life State	1899
Merica, Chas. O.	Waukesha	Life State. Countersigned from Mo.	1900
Marrison, W. J.	Milford, Mich.	Life State. Countersigned from Mich.	1900
Mendenhall, Edgar	Greensburg	Professional	1900
Moody, James A.	Mt. Etna	Professional	1900
Mitchell, Clara J.	Rushville	Professional	1900
Marshall, Marlin R.	Remington	Life State	1900
Merica, Francis M.	Lagrange	Life State	1900
Markley, Florence	Wabash	Professional	1901
Meek, Tecumseh H.	Lawrenceburg	Professional	1901
Miller, E. S.	Rockport	Life State	1902
Mitchel, Clare J.	Shelbyville	Life State	1902
McCowan, Margaret	Crown Point	Life State. Countersigned from Iowa	1902
Naylor, James M.	Waveland	First grade	
Neff, J. H.	Bunker Hill	Life State	1885
Nourse, J. W.	Rockport	Life State	1885
Northcott, Nettie T.	Vevay	Life State	1887
Nicholson, Watson	Pendleton	Professional	1889
Nysewander, J. D.	Carmi, Ill.	Professional	1890
Nelson, Joseph M.	Santa Fe	Professional	1901
Newman, Otto L.	Batesville	Professional	1901
O'Brien, James	Laporte		1873
Orr, J. Ellsworth	Geneva	Life State	1892
Orr, Walter T.	Willow	Professional	1899
Owen, W. B.	Edinburg	Professional	1894
Ochiltree, Calvin	Connersville	Professional	1902
Paxton, Sarah			1867
Phelan, W. P.	Laporte	First grade	1872
Peck, Thos. W.	Evansville	Second grade	1873
Powner, W. H.	Greensburg	First grade	1873
Pinkham, W. P.	Canton	First grade	1873
Peak, W. P.	Aurora	Life State	1885

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Perrin, J. W.	Danville, Ill.	Life State	1885
Powles, G. A.	Mishawaka	Life State	1885
Parker, Joseph W.	Terre Haute	Life State	1886
Palmer, W. C.	Columbia City	Life State	1886
Palmer, Kittie E.	Franklin	Professional	1890
Peterson, C. A.	Sheridan	Professional	1899
Pearcy, J. B	Anderson	Professional	1891
Patterson, Chas. F.	Franklin	Professional	1892
Patten, H. B.	Morristown	Professional	1894
Patterson, Chas. F.	Edinburg	Life State	1895
Palmer, Kittie E.	Franklin	Life State	1896
Payne, Wm. V.	Harrodsburg	Life State	1897
Peterson, Chas. A.	Lebanon	Professional	1898
Phillips, Mary F.		Life in com. branches. Countersigned from New York	1899
Price, Francis	Bloomington	Professional	1899
Peterson, Chas. A.	Lebanon	Life	1899
Pratt, Orville C.	Danville	Life State	1901
Pratt, Clarence	Laporte	Professional	1902
Richards, M. A.	Laporte	Second grade	1873
Roberts, Adelia	Evansville	First grade	1873
Rahm, Huldah	Evansville	Second grade	1873
Rickoff, M. F.	Nineveh	Life State	1885
Reddick, J. H.	Winamac	Life State	1887
Reilly, Edith	Evansville	Professional	1887
Reubelt, F. W.	Rensselaer	Life State	1887
Ridpath, Martha J.	Greencastle	Professional	1887
Rothert, M. W.	DeGonia	Professional	1887
Rogers, Geo. E.	Ambia	Professional	1888
Rothrock, D. A.	Valparaiso	Professional	1888
Ratcliff, Ryland	Fairmount	Professional	1889
Ricketts, Geo. S.	Bristol	Professional	1890
Rucker, W. H.	Lawrenceburg	Life State	1890
Robertson, Margaret	Wabash	Professional	1891
Rees, H. E.	Amboy	Professional	1892
Reid, A. T.	Winamac	Professional	1893
Riddle, J. H.	Scottsburg	Professional	1895
Riddle, Jesse W.	Leavenworth	Professional	1894
Rizer, Eldridge B.	Wolcott	Professional	1897
Rogers, Geo. E.	Rose Lawn	Professional	1897
Rothert, M. W.	De Gonia Springs	Life State	1897
Reece, Fred A.	Valparaiso	Professional	1898
Rountree, Bertha A.		Life in com. branches. Countersigned from Wisconsin	1899
Riddle, Jesse W.	Corydon	Life	1899

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Ray, W. E.		Life. Countersigned from Kan.	1900
Rhodes, John W.	St. Paul	Professional	1900
Robertson, Giles W.	Liberty	Professional	1900
Reber, John	Huntington	Professional	1901
Robinson, Gertrude A.	Terre Haute	Life State. Countersigned from Mich.	1901
Reber, John	Huntington	Life State	1902
Ross, Julia A.	Ft. Wayne	Life State. Countersigned from Mich.	1902
Standeford, Nannie D.	Martinsville		1870
Sanders, W. F. L.	Bloomington	First grade	1872
Sturgus, R. A.	Orleans	First grade	1873
Snoke, A. J.	Mt. Vernon	First grade	1873
Sisson, W. S.	Princeton	Second grade	1873
Snyder, George W.	Galveston	Second grade	1873
Spear, Robert	Evansville	First grade	1882
Sinclair, W. B.	San Pierre	Life State	1885
Sanders, T. J.	Butler	Life State	1885
Smith, M. E.	Kingston	Life State	1886
Starkey, J. R.	Martinsville	Life State	1886
Sanders, Amos	North Vernon	Life State	1885
Smith, Frank P.	Bedford	Life State	1886
Snyder, W. C.	Salem	Life State	1886
Salmon, Marion W.	Kilmore	Professional	1888
Saxton, F. M.	Bengal	Professional	1888
Sims, William S.	Frankfort	Life State	1888
Sherrick, John R.	Fairmount	Life State	1889
Sheppy, Charles W.	Crawfordsville	Professional	1889
Sweeney, Bertha	Pierceton	Professional	1889
Seibert, Charles K.	Bristol	Professional	1890
Senour, Will H.	Brookville	Professional	1890
Stratford, W. R.	Vevay	Life State	1890
Stroup, Della L.	Valparaiso	Life State	1890
Short, Alice Carrie.	Bloomington	Life State	1886
Stevens, Clara A.	Ann Arbor, Mich.	Professional	1892
Scott, Albert W.	Evansville	Professional	1894
Searls, O. M.	New Carlisle	Life State	1894
Smith, F. W.	Frankfort	Professional	1895
Stanton, Otis G.	West Newton	Professional	1895
Segur, Lell	Decatur	Life State	1896
Searle, M. J.	Nineveh	Life State	1897
Shafer, Charles E.	Spiceland	Professional	1897
Stanley, Thad	Tilman	Professional	1897
Seiler, C. M.	Evansville	Professional	1898
Skidmore, T. J.	Frankfort	Professional	1898
Stewart, Albert F.	Rushville	Life State	1898
Stuart, M. H.	Sheridan	Professional	1898

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Swartz, Luther E.	Nappanee	Professional	1898
Spain, Charles L.	South Bend	Life St. Countersigned from Michigan	1899
Sluss, E. E.	Roanoke	Life State in common schools. Countersigned from Ohio.	1899
Scottt, Levi H.	New Albany	Life	1899
Smeltzly, Frederick G.	Lima	Professional	1899
Steele, Oliver C.	Spiceland	Professional	1899
Skinkle, Eugene	Valparaiso	Professional	1900
Smith, Edward F.	Vevay	Professional	1900
Spaulding, Charles E.	Orleans	Professional	1900
Staley, Ora	Charlottsville	Life	1900
Stewart, Milo H.	Sheridan	Life	1900
Shock, Joseph A.	Huntington	Professional	1901
Shock, Wm. A.	Huntington	Professional	1901
Smith, Jess C.	Advance	Professional	1901
Stanton, Otis G.	Irvington	Life State	1901
Southgate, Mary Frances.	Michigan City	Life State. Countersigned from Mich.	1902
Sheehan, Sadie E.	Michigan City	Life State. Countersigned from Mich.	1902
Scott, James H.	Jeffersonville	Professional	1902
Shull, Samuel P.	Kouts	Professional	1902
Sonner, Thomas B.	English	Professional	1902
Stubbs, C. L.	Swayzee	Life State	1902
Smith, H. Lester	Brookville	Life State	1902
Trimble, Jas. M.	Greensburg	First grade	1873
Thomas, D. W.	Kendallville	First grade	1873
Tracy, P. S.	Warren	Life State	1885
Teeple, E. M.	Argos	Life State	1891
Taylor, R. F.	Jeffersonville	Life State	1892
Test, Alice	Fairmount	Professional	1892
Taylor, S. W.	Boonville	Professional	1894
Thiebaud, R. L.	Vevay	Professional	1894
Thompson, Sylvester	Petersburg	Professional	1894
Tapy, Geo. H.	South Whitley	Professional	1897
Thomas, C. E.	Bloomington	Professional	1897
Troyer, Daniel	Goshen	Professional	1897
Thompson, May E.	Huntington	Life State. Countersigned from Mich.	1899
	Michigan		1899
Tyner, Elmer E.	Ben Davis	Professional	1899
Thomas, Nellie	Ann Arbor, Mich.	Life State. Countersigned from Mich.	1899
Thomas, C. E.	Mendon, Ohio	Life State. Countersigned fro Ohio.	1900
Thompson, Geo. H.	Hobart	Professional	1900

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Trafelet, Aime L.	Vevay	Professional	1900
Tapy, Geo. H.	Columbia City	Life State	1901
Thornburg, Thos. S.	Monticello	Professional	1901
Tice, Richler S.	Middletown	Professional	1901
Trafzer, Frank E.	Harrisville	Professional	1901
Tyler, L. L.	Fairmount	Life State. Countersigned from Mich.	1901
Trafzer, Frank E.	Union City	Life State	1902
Thornton, J. F.	Rockville	Life State	1902
Urner, Edward E.	Mitchell	Life State	1888
Vawter, Achilles J.	Indianapolis	First grade	1856-1874
Vories, Hervey D.	Franklin	Professional	1887
Vandeveer, Richard	New Paris	Professional	1890
Vinzant, C. E.	Rockville	Professional	1894
Vandeveer, Richard	New Paris	Life State	1894
Van Gorder, W. P.	Knightstown	Professional	1897
Voorhees, H. S.	Brookville	Life State	1898
Welch, Walter	Evansville	Second grade	1872
Wetherell, J.	Cannelton	First grade	1872
Warren, Evelyn M.	Laporte	Second grade	1873
Wilson, Timothy	Spiceland	First grade	1874
Wells, Mrs. D. B.	Ft. Wayne	First grade	1876
Weed, Flora E.	Ft. Wayne	First grade	1876
White, J. D.	Greensburg	Life State	1885
White, Farrabee W.	New Castle	Life State	1885
Wilkie, H. F.	Milford	Life State	1885
Wood, J. A.	Salem	Life State	1885
Wissler, B. F.	Hagerstown	Life State	1885
Williams, L.	Richmond	Life State	1885
Walters, John H.	Willshire, Ohio	Life State	1886
Warfel, J. F.	Ladoga	Life State	1886
Weathers, John R.	Cannelton	Professional	1886
Wilson, George S.	Greenfield	Professional	1886
Williams, Mrs. D. F.	Greensburg	Life State	1887
Wood, C. H.	Winchester	Life State	1887
White, Mary E.	Evansville	Professional	1888
Wilson, Geo. S.	Greenfield	Life State	1888
Weir, Clara	Lagrange	Professional	1889
Woody, H. G.	Kokomo	Professional	1889
Welker, Geo. H.	Poseyville	Life State	1891
Wells, David	Arcadia	Professional	1891
Wheeler, W. M.	Evansville	Professional	1891
Wilkie, Paul	Silver Lake	Professional	1891
Wilson, Howard L.	Rensselaer	Life State	1892
Weedman, Geo. P.	Cannelton	Professional	1892
Webb, Ida	Covington	Professional	1893

Name of Applicant.	*Postoffice Address.*	*Kind of License.*	*Date of Issue.*
Weedman, Geo. P.	Cannelton	Life State	1893
Woody, H. G.	Kokomo	Life State	1894
Weir, J. C.	New Castle	Life State	1895
Wertz, Samuel	Columbus	Professional	1897
Wyant, Jacob W.	Angola	Life State	1897
West, Chas. H.	Ambia	Professional	1898
Wilson, Emma F.	Alexandria	Professional	1898
Wood, F. F.		Life State. Countersigned from Wisconsin and Michigan	1899
Wilson, Eli P.	Union	Professional	1899
Wilson, Maggie A.	Jasper	Professional	1899
Wimpy, Asa N.	Jonesboro	Professional	1899
Wilson, Mrs. Emma F.	Alexandria	Life State	1899
Woodard, Mary E.	Anderson	Professional	1899
Wilkie, Paul	Cambridge City	Professional	1900
Warren, I. N.	Laporte	Life State	1900
Wells, William W.	Terre Haute	Professional	1902
Whitenack, O. O.	North Judson	Life State	1902
Zeller, J. A.	Evansville	First grade	1872
Zearing, Maggie	Greensburg	Second grade	1873
Zell, Oscar B.	Clinton	Life State	1896

(b) SIXTY MONTHS' STATE LICENSES.

1899.

Name.	*Address.*	*Month.*	*Year.*
Abel, Wm	Seymour	June	1899
Bradt, Hale	Bloomington	July	1899
Brandenburg, W. C.	Veedersburg	August	1899
Brooks, Chas	Salem	July	1899
Callahan, F. E.	Mitchell	May	1899
Coffin, Cyrus	Carthage	May	1899
Engleman, James O.	Delphi	June	1899
Giltner, E. E.	Otto	August	1899
Hall, S. H.	Salem	August	1899
Hoffman, M. B.	Gaston	July	1899
Jones, W. U.	Trafalgar	May	1899
Morris, S. D.	Eaton	July	1899
Pike, F. H.	Valparaiso	August	1899
Richards, Ella M.	Auburn	August	1899
Royalty, W. J.	Sophia	June	1899
Slabaugh, J. S.	Plevna	July	1899
Sweitzer, Ada E.	Lagrange	July	1899
Schoonover, W. E.	Laurel	July	1899

Name.	Address.	Month.	Year.
Tucker, D. W.	Kappa	August	1899
Tucker, E. W.	Winamac	August	1899
Williams, Oscar H.	Terre Haute	July	1899

1900.

Name.	Address.	Month.	Year.
Archer, Rudolph	Versailles	May	1900
Alwine, W. H.	Logansport	July	1900
Ashton, Wm	Danville	May	1900
Bossert, Michael	Blue Creek	August	1900
Conner, A. T.	Walesboro	May	1900
Cushman, W. J.	Bloomfield	July	1900
Deener, Arthur	Terre Haute	August	1900
Gard, Willis L.	Harmony	May	1900
Gold, Earl T.	Lawrenceburg	March	1900
Hamilton, Charles	Sharpsville	June	1900
Hedgepeth, Victor	Peru	July	1900
Hill, W. H.	Terre Haute	May	1900
Hillis, R. C.	Logansport	April	1900
Hirsbrunner, J. G.	Rockville	June	1900
Hughart, A. A.	Valparaiso	March	1900
Hufty, E. E.	Terre Haute	May	1900
James, C. M.	Arcadia	June	1900
Jeffrey, James H.	Laporte	March	1900
Jones, N. Guy	Cadiz	May	1900
Kahl, Edwin	New Albany	May	1900
McCormick, T. H.	Ft. Wayne	July	1900
Marshall, Melson C.	Volga	May	1900
Mitchell, C. O.	Eaton	March	1900
Millett, Edward R.	Mt. Vernon	May	1900
Miller, Otis	Gibson	August	1900
Morgan, Edward	Aroma	August	1900
Newell, J. E.	Bristol	May	1900
Niekamp, H. H.	Monroeville	March	1900
Nichols, Alice	Bloomington	June	1900
Packard, Edgar	Winamac	July	1900
Prickett, E. E.	Wolf Lake	July	1900
Price, L. H.			1900
Roberts, Flora	W. Lafayette	January	1900
Ross, Louis	Moores Hill	May	1900
Robinson, W. D.	Batesville	May	1900
Stahl, J. H.	St. Joe Station	January	1900
Schlegel, J. C.	Daleville	July	1900
Smith, Abagail	Mt. Vernon	August	1900
Stott, James W.	Princeton	July	1900
Taylor, A. M.	Raleigh	March	1900
Trafzer, Frank E.	Union City	April	1900
Tice, R. C.	Middletown	July	1900

Name.	Address.	Month.	Year.
Warren, I. N.	Laporte	March	1900
Weber, Henry	Oakville	May	1900
Winans, B. A.	Churubusco	June	1900
Witter, C. Orville	Winona Lake	July	1900
Whitenack, O. Odell	North Liberty	August	1900
Woodburn, Ethelbert	Fowler	February	1900

1901.

Name.	Address.	Month.	Year.
Aduddell, H. F.	Claypool	March	1901
Brady, Chas. H.	Angola	April	1901
Belzer, F. O.	Lawrence	April	1901
Brewer, Elias	Messena	May	1901
Burton, Will A.	Franklin	March	1901
Burger, John G.	Ft. Branch	May	1901
Clauser, J. L.	Rossville	June	1901
Clem, Harry M.	Huntertown	March	1901
Clem, William	South Bend	May	1901
Colvin, Daisy	Yorktown	April	1901
Demuth, George	Peru	February	1901
Derbyshire, G. E.	Bloomington	April	1901
Dibler, C. S.	Scottsburg	April	1901
Ewbank, Gertrude	Indianapolis	July	1901
Faris, C. E.	Tunnelton	March	1901
Farnam, Fred R.	Chesterton	February	1901
Fireston, Tim D.	Westville	February	1901
Grant, O. E.	Columbia City	March	1901
Greider, H. L.	North Webster	March.	1901
Greeson, Walter	Alto	May	1901
Gibbs, E. B.	Rising Sun	February	1901
Goldsborough, F. M.	Valparaiso	February	1901
Goodley, Samuel	Ferndale	August	1901
Hamilton, I. C.	Walkerton	March	1901
Harris, K. W.	Owensville	April	1901
Highley, A. E.	Van Buren	March	1901
Hutchinson, N. F.	Phlox	March	1901
Ihrig, Herbert	Laud	June	1901
Kizer, J. H.	Valparaiso	May	1901
Lewark, V. E.	Rushville	April	1901
Le Vaugh, Carrie	Macy	January	1901
McGregor, James H.	Owensville	March	1901
Melton, O. D.	Bloomington	February	1901
Newson, Curtis B.	Plainfield	May	1901
Platt, L. T.	Redkey	August	1901
Pelsma, John	Foraker	January	1901
Price, Lyman	Scottsburg	May	1901
Roberts, H. B.	Kennard	March	1901
Roberts, Howard	Strawtown	January	1901

Name.	Address.	Month.	Year.
Stevens, Frank	Shelby	May	1901
Stegner, Virgil F.	Brookville	June	1901
Shipman, John	Bloomington	April	1901
Stickles, A. M.	Yorktown	March	1901
Smith, J. McBeth	Ft. Wayne	March	1901
Stonecipher, T. H.	Mt. Vernon	February	1901
Stockinger, Will	Manilla	February	1901
Stubbs, C. L.	Bunker Hill	March	1901
Stuhrman, W. C.	Gentryville	June	1901
Shull, S. P.	Valparaiso	June	1901
Vandegrift, A. F.	Bloomington	February	1901
Ward, L. C.	Bloomington	February	1901
Wilson, G. M.	North Salem	April	1901

1902.

Name.	Address.	Month.	Year.
Allee, Guy	Zenas	March	1902
Beeman, Ray	Valparaiso	April	1902
Bean, H. R.	Galveston	May	1902
Bird, Carl	Winchester	July	1902
Bruner, Jesse	Rochester	April	1902
Burton, Oran E.	Franklin	June	1902
Carson, C. M.	Thorntown	April	1902
Devricks, Robert	Lafontaine	March	1902
Earnest, Emma	Carthage	February	1902
Ferrell, S. C.	Valparaiso	April	1902
Galbreath, Ida	Galveston	June	1902
Gress, L. L.	Terre Haute	March	1902
Greeson, F. L.	Bloomington	May	1902
Griffin, Catharine	Greenfield	May	1902
Goen, L. L.	Crothersville	March	1902
Goldsberry, Walter	Battle Ground	May	1902
Hamilton, N. D.	Zanesville	February	1902
Hammond, O. M.	Union City	April	1902
Hardwick, Wilson	Trenton	April	1902
Hallett, Thomas	Corydon	May	1902
Haskins, Edgar N.	Monroe City	July	1902
Headlee, W. O.	Manilla	April	1902
Hill, Howard C.	Muncie	March	1902
Hostetler, J. W.	Shipshewana	May	1902
Jerman, Myrtle	Newpoint	July	1902
Kirby, Thos. J.	Terre Haute	March	1902
Leonard, Mrs. Etta D.	Mishawaka	June	1902
Lee, Bertha B.	Greensburg	April	1902
Lord, S. G.	Brookville	May	1902
McGraw, W. N.	Tipton	February	1902
McFerren, E. E.	Terre Haute	March	1902
Mann, Chas. C.	Terre Haute	March	1902

Name.	*Address.*	*Month.*	*Year.*
Morrison, W. I.	Scottsburg	May	1902
Neal, Bell	Valparaiso	April	1902
Owens, Mrs. Coy B.	Franklin	March	1902
Peters, Will E.	Versailles	April	1902
Rector, C. A.	Winona Lake	March	1902
Rice, E. E.	Valparaiso	January	1902
Royce, Jas. B.	Holton	February	1902
Roe, S. H.	Chesterton	June	1902
Rose, Helen	Ireland	July	1902
Rogers, L. B.	Slate	January	1902
Steele, Chas. W.	Terre Haute	July	1902
Steele, A. C.	North Liberty	June	1902
Sheckell, O. M.	Danville	July	1902
Smith, May	Mt. Vernon	March	1902
Scott, Will	Medora	July	1902
Terry, H. W.	Morris	April	1902
Thiebaud, R. L.	Rising Sun	January	1902
Thornton, J. F.	Rockville	March	1902
Thornton Wilson	Granger	April	1902
Thomas, Frank W.	Terre Haute	March	1902
Weissinger, Jos	Mt. Vernon	March	1902
Wells, B. F.	Kingsbury	May	1902
Whistler, J. E. J.	Evansville	January	1902
White, C. E	Somerset	May	1902
White, Sherman	Laketon	July	1902

VII. Statistics for the Year Ending July 31, 1902.

1. Introduction.
2. Summaries.
3. Tables by Counties.
    - Funds.
    - Revenues.
    - Enumeration.
    - Enrollment.
    - Attendance.
    - Schoolhouses (Kinds).
    - Teachers Employed.
    - Amounts Paid Teachers.
    - Receipts and Expenditures.
    - Schoolhouses (Value).
    - Length of Terms.
    - Libraries and Reading Circles.
    - Trustees' Salaries.
    - High School (See H. S. Section).
    - Compulsory Education (See Comp. Ed. Section).
    - Institute Expenditures.

1. Introduction.

The statistical matter for the school year ending July 31, 1902, is given here more or less in detail. The remarkable development of our schools during the last two decades requiring increased expenditures each year, makes it desirable to add to this report certain averages showing the sources of our revenues and the disbursements from year to year since 1880.

Attention is called particularly to the fact that the increased expenses are met largely by local taxation.

2. Summaries for Year Ending July 31, 1902.

I. THE SCHOOL FUNDS, 1902.

A. COMMON SCHOOL FUND.

(1) Additions to Fund, 1902.

Amount held by counties June, 1901	$7,925,579 50
Amount added by fines from county clerks June, 1902	18,958 74
Amount added by fines from justices June, 1902	24,485 69
Amount added from all other sources June, 1902	9,706 77
Total	$7,978,730 70

(2) Deductions from Fund, 1902.

Amount deducted on account of errors in reports of 1901	$150 02
Total held by counties June, 1902	$7,978,580 68
Increase in common school fund, 1902	$43,001 18

B. CONGRESSIONAL TOWNSHIP FUND.

(1) Additions to Fund, 1902.

*Amount held by counties June, 1901	$2,464,746 81
Amount since added from other sources	2,462 92
Total	$2,467,209 73

(2) Deductions from Fund, 1902.

Amount deducted on account of errors	1,905 09
Total balance held by counties June, 1902	$2,465,304 64

*$0.02 deducted on account of error in Fayette County, 1901.

SUMMARY OF SCHOOL FUNDS, 1902.

Common School Fund held by counties June, 1902	$7,978,580 68
Congressional Township Fund held by counties June, 1902	2,465,304 64
Total fund June, 1902	$10,443,885 32
Net increase to fund during year	53,558 99

A. COMMON SCHOOL FUND. (Condition of.)

Amount of fund safely invested	$7,405,823 43
Amount of fund not safely invested	29,317 89
Amount of fund not invested and in county treasuries drawing interest from the counties	543,439 36
Total	$7,978,580 68

B. CONGRESSIONAL TOWNSHIP FUND. (Condition of.)

Amount of fund safely invested	$2,172,202 59
Amount of fund not safely invested	14,718 45
Amount of fund not invested and in county treasuries drawing interest from the counties	278,383 60
Total	$2,465,304 64

C. SUMMARY OF FUNDS INVESTED.

Amount of both funds safely invested	$9,578,026 02
Amount of both funds not safely invested	44,036 34
Amount of both funds not invested and in county treasuries.	821,822 96
Total as in "A" and "B"	$10,443,885 32

II. SCHOOL REVENUES, 1902.

A. TUITION REVENUE.

Distributed by County Auditors in January, 1902.

Common school revenue	$970,683 61
Congressional township revenue	77,842 13
Local tuition revenue	1,203,823 55
Liquor license revenue	264,015 51
Total distributed	$2,516,364 80

In July, 1902.

Common school revenue	$1,119,561 50
Congressional township revenue	61,217 46
Local tuition revenue	1,732,641 29
Liquor license revenue	258,429 01
Dog fund revenue	101,788 60
Total distributed	$3,273,637 86
Grand total for year	5,790,002 66

B. SPECIAL SCHOOL REVENUE, 1902.

Distributed by County Auditors.

In January	$1,121,404 60
In July	1,673,947 72
Total	$2,795,352 32

C. SUMMARY OF REVENUES, 1902.

Tuition revenue distributed January, 1902	$2,516,364 80
Tuition revenue distributed July, 1902	3,273,637 86
Special school revenue distributed January, 1902	1,121,404 60
Special school revenue distributed July, 1902	1,673,947 72
Grand total	$8,585,354 98

III. ENUMERATION, 1902.

White males (6 to 21 years of age)	385,738
Colored males (6 to 21 years of age)	7,415
Total males (6 to 21 years of age)	393,153
White females	361,061
Colored females	7,587
Total females	368,648
Grand total	761,801
Total number white children	746,799
Total number colored children	15,002
Grand total as above	761,801
Enumeration, 1901	757,684
Increase	4,117

IV. ENROLLMENT AND ATTENDANCE FOR YEAR ENDING JULY 31, 1902.

A. ENROLLMENT.

White males	279,042
Colored males	5,005
White females	270,787
Colored females	5,390
Total	560,224
Enrollment, 1900-1901	556,731
Increase 1902 over 1901	3,493

Total daily attendance (1902)	423,078
Attendance last year (1901)	420,276
Increase 1902 over 1901	2,802

Attendance, 55 per cent. of enumeration (6 to 21 years of age).
Attendance, 76 per cent. of enrollment.
Enrollment, 74 per cent. of enumeration.

V. NUMBER SCHOOLHOUSES, 1901-1902.

Stone	97
Brick	5,080
Frame	4,807
Log	3
Total	9,987

VI. TEACHERS EMPLOYED, 1901-1902.

Males	7,006
Females	9,033
Total	16,039
Number of teachers last year	15,979
Increase	60

VII. AVERAGE DAILY WAGES OF TEACHERS, 1902.

In Townships—	
Males	$2 38
Females	2 26
Average	$2 33
In Towns—	
Males	$3 13
Females	2 32
Average	$2 63
In Cities—	
Males	$4 34
Females	2 72
Average	$299
In State at large	$2 51

VALUE OF SCHOOL PROPERTY.

Estimated value of schoolhouses, grounds etc.	$22,904,607 00
Estimated value school apparatus	1,277,455 00
Total value	$24,182,062 00

Number schoolhouses erected during year, 202.
Value schoolhouses erected during year, $751,021.69.

VIII. AVERAGE LENGTH OF SCHOOL IN DAYS, 1901-1902.

(a) In townships	126
(b) In towns	153
(c) In cities	179
(d) In State at large	146

IX. LIBRARIES AND READING CIRCLES, 1901-1902.

A. LIBRARIES.

(1)	In Towns and Cities—	
	(a) Number volumes in libraries	635,401
	(b) Number volumes added during year	35,994
	Total	671,395
	(c) Number volumes read during year	1,383,011
(2)	In Townships—	
	(a) Number volumes in libraries	101,668
	(b) Number volumes added during year	5,174
	Total	106,842
	(c) Number volumes read during year	41,080

B. YOUNG PEOPLE'S READING CIRCLE LIBRARIES.

(1)	Number volumes in libraries	377,270
(2)	Number volumes added during year	58,881
	Total	436,151
(3)	Number members in Young People's Reading Circle	172,659

X. TOWNSHIP INSTITUTES, SALARIES PAID TRUSTEES FOR MANAGING EDUCATIONAL WORK, ETC.

a.	Number Township Institutes held during year	6,421
b.	Amount paid teachers for attending Institutes	$149,602 20
c.	Amount paid trustees for managing educational work—	
	(1) Employing teachers	$11,664 75
	(2) Attending institutes	10,072 00
	(3) Handling text-books	7,590 48
	(4) Making school-book settlements	6,562 00
	(5) Other services	46,869 31
	Total	$82,758 54

XI. AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1901-1902.

a.	In towns	$14,006 62
b.	In cities	28,904 42
	Total	$42,911 04

XII. AMOUNT SALARIES PAID COUNTY SUPERINTENDENTS.

Estimated	$92,000 00

XIII. NUMBER OF TOWNSHIPS WHICH DID NOT MAINTAIN SIX MONTHS OF SCHOOL.

Townships	80

XIV. PAID TEACHERS.

(Year Ending July 31, 1902.)

Paid teachers in townships	$3,132,692 85
Paid teachers in towns	578,495 79
Paid teachers in cities	1,772,749 37
Paid teachers in entire State	$5,483,938 01

XV. BUILDING AND REPAIRS.

(Year Ending July 31, 1902.)

Total for building and repairs	$986,652 00

XVI. TRANSFER OF PUPILS.

Amount paid for transfer of pupils for year	189,430 74

XVII. SUPERVISION.

(Year Ending July 31, 1902.)

Total paid for supervision, not including county superintendents' salaries	$255,212 12

XVIII. HIGH SCHOOL STATISTICS.

(See High School section, this report.)

XIX. COMPULSORY EDUCATION.

(See Compulsory Education section, this report.)

XX. COUNTY INSTITUTES, 1901.

Total enrollment (one county out)	17,025
Total attendance (two counties out)	15,597.6
Length of session in each county, days	5
Amount paid by counties for maintenance	$8,462 40
Average paid per county	$93 00
Total cost of County Institutes (one county out)	$21,469 53
Average cost of County Institutes	$235 92

XXI. TOWNSHIP INSTITUTES.

(Year Ending July 31, 1902.)

Total number held in State	6,421
Average number held in each township	6.3
Paid teachers in wages for attending Township Institutes	$149,602 20

XXII. COMPARATIVE TABLES.

In the Tenth Biennial Report of this Department, Hon. James H. Smart published statistical matter in comparative tables from 1865 to 1880. The following tables, together with those above referred to, will give a brief survey of the growth of Indiana's schools:

TABLE A. *PRINCIPALS OF SCHOOL FUNDS BY CALENDAR YEARS.

Year.	*Common School Fund.*	*Congressional Township Fund.*
1880	$6,616,112 02	$2,449,142 69
1885	6,923,854 57	2,404,936 82
1890	7,290,065 20	2,494,105 35

Year.	Common School Fund.	Congressional Township Fund.
1892	7,454,632 41	2,500,761 87
1893	7,521,226 45	2,472,150 97
1894	7,585,228 10	2,571,935 22
1895	7,645,369 22	2,501,590 08
1896	7,714,433 46	2,503,998 73
1897	7,752,727 96	2,470,064 28
1898	7,799,150 75	2,504,033 26
1899	7,842,032 77	2,469,982 50
1900	7,892,303 52	2,467,655 53
1901	7,925,579 50	2,464,746 83
1902	7,978,580 70	2,465,304 64

*These amounts are loaned by County Auditors at 6 per cent. interest, payable annually at the end of the borrowers' year. Counties must pay interest on unloaned balances. The congressional principal has reached its maximum (approximately). The common school fund increases by fines, forfeitures, escheats, etc.

TABLE B. *REVENUES AVAILABLE FOR SCHOOL PURPOSES EACH CALENDAR YEAR.

Year.	Tuition Revenue.	Special School Revenue.
1880	$2,943,105 77	$1,461,891 15
1885	3,371,295 00	1,545,739 92
1890	3,794,526 03	1,777,598 32
1892	3,835,918 91	1,773,735 89
1893	4,428,267 10	1,940,462 09
1894	4,379,666 10	2,140,847 06
1895	4,735,088 63	2,412,507 03
1896	4,301,413 04	2,275,857 89
1897	4,533,316 62	2,411,351 23
1898	4,966,839 36	2,425,340 15
1899	5,290,217 61	2,507,825 97
1900	5,443,092 17	2,578,046 67
1901	5,480,400 56	2,542,460 01
1902	5,790,002 66	2,795,352 32

*These revenues represent the January and June distributions of each calendar year. The June distribution is used, ordinarily, to meet the expenses of the schools for the first half of the succeeding school year. In view of this fact the sum of the tuition and special revenues set opposite each year above will not accord with the total revenues available for school expenditure as set forth in the succeeding table (Table C), which shows sources for the actual school year, namely, the June distribution of one year with the January distribution of the succeeding year. Neither will these figures agree with "Table D," showing the expenditures. Expenditures are always in excess of the revenues from tax and interest sources. The sources other than revenues are private tuition charges, money realized from bond sales, school warrants, and transfers.

TABLE C. SOURCES OF ALL SCHOOL

I.	STATE SOURCES. II.	III.	IV.	V.	VI.
School Year Ending July 31—	Raised by State Tax.	Interest on Common School Fund Loans Paid by Borrowers.	Interest on Congressional Township Fund.	Total Revenue from State Sources.	Revenue Per Capita from State Sources.
1880	$1,519,791 66	$204,145 30	$197,675 80	$1,921,612 76	$2 71
1884	1,408,113 49	211,112 19	187,162 70	1,806,388 38	2 51
1887	1,443,176 55	449,612 15	197,748 14	2,090,536 84	2 80
1888	1,403,412 91	464,140 73	218,118 93	2,085,672 57	2 74
1889	1,390,092 27	462,207 22	199,165 22	2,051,464 71	2 71
1890	1,446,255 46	476,184 31	180,188 30	2,102 628 07	2 72
1891	1,453,568 01	427,550 42	213,464 60	2,094,583 03	2 72
1892	1,483,036 42	436,924 66	191,761 17	2,111,722 25	2 76
1893	1,983,348 34	435,197 84	157,246 10	2,575,792 28	3 31
1894	2,077,323 12	436,960 17	161,906 62	2,676,189 91	3 36
1895	1,980,452 20	431,994 76	153,169 95	2,565,616 91	3 17
1896	1,868,745 11	444,400 13	154,817 02	2,467,962 26	3 08
1897	1,535,429 04	422,125 88	162,729 63	2,120,028 55	2 89
1898	1,568,187 59	437,794 99	148,744 53	2,154,727 11	2 87
1899	1,559,141 91	436,847 51	167,748 68	2,163,741 10	2 86
1900	1,595,344 10	451,055 84	147,456 01	2,193,855 95	2 90
1901	1,564,955 27	443,811 36	153,145 27	2,161,911 10	2 73
1902	1,623,170 87	423,130 68	139,059 59	2,185,361 14	2 88

NOTES ON ABOVE TABLE: 1. In columns II, III, VII, VIII, IX, XI the sources of the revenues actually used are the January distribution of any year, together with the June distribution of the previous year, not the two distributions of a calendar year. The school year embraces the last half of one and the first half of the next calendar year.

2. In column IV the current year is used. The congressional interest remains about the same from year to year.

3. The table shows that the State's participation in education is about the same per capita each year, whereas the local support has more than doubled in the period from 1880 to 1902.

REVENUES IN INDIANA.

LOCAL SOURCES.

VII.	VIII.	IX.	X.	XI.	XII.	XIII.	XIV.
Local Tuition from Local Tax.	Dog Fund Revenue.	Special School Revenue.	Interest on Common School Fund Paid by Counties on Unloaned Fund.	Liquor License Revenue.	Total School Revenue from Local Sources.	Revenue Per Capita from Local Sources.	Total Per Capita Revenue from both State and Local Sources.
$589,093 21	None.	$1,461,891 15	$8,986 36	$193,512 15	$2,253,482 87	$3 18	$5 89
806,415 35	None.	1,410,091 09	20,969 11	279,885 89	2,517,361 44	3 50	6 01
951,979 78	None.	1,546,659 90	31,377 11	331,256 59	2,861,273 38	3 84	6 64
1,008,072 56	None.	1,615,386 52	22,202 16	344,342 79	2,990,004 03	3 93	6 67
1,001,032 68	None.	1,567,921 46	31,743 07	346,652 83	2,947,350 04	3 87	6 60
1,172,232 39	$45,752 61	1,777,500 85	11,474 30	337,779 83	3,344,739 98	4 42	7 06
1,370,799 85	57,187 13	1,705,727 94	26,421 78	353,155 40	3,513,292 10	4 56	7 27
1,408,336 64	67,789 30	1,689,135 64	18,872 50	358,407 04	3,542,541 12	4 64	7 40
1,051,796 08	43,714 74	1,810,417 39	25,192 54	391,554 56	3,322,675 31	4 28	7 59
1,433,792 75	18,630 54	2,048,179 03	18,646 14	395,629 80	3,914,878 26	4 92	8 28
1,562,155 75	17,421 69	2,415,600 44	20,937 54	396,160 00	4,412,275 42	5 45	8 77
1,472,016 56	15,713 81	2,239,349 44	12,671 83	377,937 72	4,117,689 36	5 15	8 24
1,770,816 24	15,545 71	2,316,077 11	27,588 58	344,492 17	4,474,519 81	6 09	8 98
2,228,546 40	26,926 47	2,493,610 32	29,712 31	386,637 07	5,165,432 57	6 89	9 76
2,489,396 06	15,638 45	1,855,543 91	30,686 88	401,243 70	4,572,509 00	6 32	8 92
2,599,262 95	151,744 65	1,838,022 79	19,460 42	426,670 37	5,035,161 18	6 67	9 56
2,687,931 96	96,265 24	2,557,590 51	29,405 41	436,946 64	5,808,139 76	7 68	10 54
2,706,923 83	87,873 67	2,535,696 45	52,403 86	487,601 69	5,870,499 50	7 78	10 63

4. The per capita of revenues as above, column XIV, does not accord with the per capita cost of education (Table D). This is due to the fact that there are sources and expenditures which do not come through the regular channels of school taxes and revenues, e. g., tuition paid by private parties for the privilege of sending a child from one corporation to another. The per capita distribution of school revenues is never a measure of the per capita expenditure. The whole object in making this table is to show the relative degrees of participation of the State and local corporations in raising school revenues.

TABLE D. EXPENDITURES FOR THE MAINTENANCE OF COMMON AND HIGH SCHOOLS. COMPARATIVE TABLE.

NOTE.—This table takes no account of expenditures for the State's higher institutions.

Year.	*Total Expenditure for Schools.**	*Per Capita Expenditure on School Enumeration.**	*Per Capita Expenditure on School Enrollment.**
1897	$7,696,985 13	$10 25	$13 96
1898	7,846,139 24	10 39	13 85
1899	8,188,088 74	10 83	14 70
1900	8,182,526 72	10 82	14 48
1901	8,444,267 56	11 14	15 16
1902	9,405,513 14	12 34	16 78

*These items show all expenditures from the school funds (State and local). They do not take account of the following, paid from funds outside of school revenues:

(a) Annual salaries of Township Trustees from township funds (approximated) $80,000 00

(b) Compulsory education expenses from county funds. 36,000 00

(c) Salaries of County Superintendents from county funds (approximated) 92,000 00

(d) Funds realized from the sale of local school bonds for building purposes..... No data.

(e) Amount paid by counties out of county fund for County Institutes (1901)..... 8,462 40

(f) The total expended on account of items above (a, b, c, d, e,) will approximate $500,000 annually, which, added to the "total expenditures," would raise the per capita accordingly each year.

TABLE E. TEACHERS' WAGES—COMPARISON.

Year.	Total Expended for Teachers.	Average Yearly Wages of Teachers of All Grades and High Schools.	Average Daily Wages.					
			In Townships.		In Towns.		In Cities.	
			Males.	Females.	Males.	Females.	Males.	Females.
1897	$4,516,658 40	$300 07	. . .	. . .	. . .	. . .	. . .	. . .
1898	4,762,347 32	312 83	*	*	*	*	*	*
1899	4,800,964 68	309 98	$2 10	$1 90	$2 99	$2 04	$4 34	$2 33
1900	5,023,381 27	321 68	2 11	1 94	3 08	2 03	4 31	2 56
1901	4,930,292 97	308 54	2 14	1 94	3 06	2 07	4 38	2 34
1902	5,483,938 01	341 91	2 38	2 26	3 13	2 32	4 34	2 72

*The statistics for 1898 are given for all teachers in each corporation—not divided into classes of males and females: In townships, $1.98; in towns, $2.32; in cities, $2.58.

TABLE F. PAY OF TOWNSHIP TRUSTEES.

Year.	*Amount Paid Trustees for Managing Educational Affairs.*
1897	$87,607 64
1898	89,967 77
1899	110,122 90
1900	103,818 61
1901	109,975 68
1902	87,049 58

TABLE G.

Year.	*Enumeration.*	*Enrollment.*	*Attendance.*
1880	703,558	511,283	321,659
1885	740,949	504,520	332,746
1890	*770,722	512,955	342,275
1892	*776,963	511,823	360,664
1893	*795,256	519,009	350,963
1894	*808,261	541,570	392,689
1895	*798,917	529,345	392,015
1896	734,640	543,665	401,702
1897	749,902	551,073	402,747
1898	754,945	566,157	†432,931
1899	755,698	556,651	424,725
1900	756,004	564,807	429,566
1901	757,684	556,731	420,276
1902	761,801	560,224	423,078

*From 1890 to 1895, inclusive, the enumeration lists were "padded." The new law on this subject makes it difficult to return an incorrect list.

†The best attendance is shown in 1898. This was due to the then new Compulsory Education Law.

TABLE H.

The following table shows total amount of school fund since 1862, and the per capita belonging to each child of school age in the State:

Year.	*Enumeration.*	*Total School Fund, Common and Congressional.*	*Per Capita of Funds on Enumeration.*	*Interest Distributed Upon Basis of Funds Per Capita on Enumeration.*
1862	528,583	$7,193,154 91	$13 61	....
1864	557,092	7,778,355 94	13 96	....
1866	559,778	7,611,337 44	13 59	....
1868	592,865	8,259,341 34	13 93	....
1870	619,627	*8,575,047 49	13 84	....
1872	631,539	8,437,593 47	13 36	....
1874	654,364	8,711,316 60	13 31	....
1875	667,736	8,799,191 64	13 18	....
1876	679,230	8,870,872 43	13 06	....
1877	694,706	8,924,570 34	12 85	....
1878	699,153	8,974,455 55	12 85	....
1879	708,101	9,013,061 75	12 73	....
1880	703,558	9,065,254 73	12 88	....
1885	740,949	9,328,791 39	12 59	....
1890	770,722	9,784,170 55	12 69	.76
1892	776,963	9,955,394 28	12 81	.77
1893	795,256	9,993,377 42	12 56	.75
1894	808,261	10,157,163 32	12 56	.75
1895	798,917	10,146,959 30	12 70	.76
1896	734,640	10,218,432 19	13 90	.83
1897	749,902	10,222,792 24	13 63	†.82
1898	754,945	10,303,184 01	13 63	†.82
1899	755,698	10,312,015 27	13 64	†.82
1900	756,004	10,359,969 05	13 70	†.82
1901	757,684	10,390,326 33	13 71	†.82
1902	761,801	10,443,885 34	13 70	†.82

*It is believed that the figures for 1870, which were taken from a former report, are not accurate.

†It is apparent that the growth in the school funds can no longer exceed the growth in school enumeration. For six years the per capita distribution upon the basis of the interest from the funds has been the same amount, namely, 82 cents.

TABLE I. ADDITIONS TO COMMON SCHOOL FUNDS.

Year.	Fines and Forfeitures.	Balance from Other Sources.	Total Additions.
1880	$43,910 48	$8,489 67	$52,400 15
1881	43,262 65	3,848 52	47,111 17
1882	53,591 59	26,644 06	80,235 65
1883	54,470 93	4,300 21	58,771 14
1884	58,220 46	6,939 11	65,159 57
1885	49,860 77	6,664 28	56,525 05
1886	57,907 91	4,465 27	62,373 18
1887	68,423 30	14,143 70	82,567 00
1888	70,617 08	13,167 60	83,784 68
1889	44,094 58	12,699 56	56,794 14
1890	68,208 16	14,455 88	82,664 04
1891	61,716 07	9,189 97	70,906 04
1892	71,106 23	11,134 86	82,241 09
1893	57,120 95	9,473 09	66,594 04
1894	58,839 43	5,162 22	64,001 65
1895	59,969 57	14,867 06	74,836 63
1896	57,119 03	11,945 21	69,064 24
1897	34,738 97	7,919 73	42,658 70
1898	41,682 94	4,739 85	46,422 79
1899	36,765 53	8,477 24	45,242 77
1900	44,858 23	6,439 64	51,297 87
1901	34,369 12	2,698 46	37,067 58
1902	43,444 43	9,706 77	53,151 20

TABLE J. SCHOOLHOUSES, NUMBER OF TEACHERS AND SCHOOL TERMS.

Year.	Number of Schoolhouses.	Number of Teachers.	Average Length of School in Days.
1880	9,647	13,578	136
1885	9,877	13,254	127
1890	9,907	13,278	130
1892	9,873	13,549	132
1893	10,007	13,896	No data.
1894	9,327	14,071	No data.
1895	9,327	13,869	No data.
1896	10,051	14,884	No data.
1897	10,053	15,052	136
1898	9,754	16,223	144
1899	9,983	15,488	149
1900	10,038	15,617	152
1901	10,003	15,979	140
1902	*9,987	16,039	146

*On account of school consolidation we have probably reached our maximum number of schoolhouses.

3. Tables by Counties.

COMMON SCHOOL FUND, 1901–1902.

Number.	COUNTIES.	Amount Held by Counties as Reported June, 1901.	Amount Added by Fines from County Clerks, 1902.	Amount Added by Fines from Justices of the Peace, 1902.	Amount Added from All Other Sources, 1902.	Amount Held by Counties, 1902.	Increase in Common School Fund, 1902.
1	Adams	$58,167 23	$335 75	. .	. . .	$58,502 98	$335 75
2	Allen	202,268 88	55 00	$1,462 88	. .	203,786 76	1,517 88
3	Bartholomew	85,516 55	83 00	150 68	. .	85,750 23	233 68
4	Benton	40,138 28	150 01	18 00	. . .	40,306 29	168 01
5	Blackford	39,512 05	194 40	570 78	. . .	40,277 23	765 18
6	Boone	99,629 86	241 60	92 01	. . .	99,963 47	333 61
7	Brown	33,380 64	46 85	2 07	. .	33,429 56	48 92
8	Carroll	67,067 48	19 00	34 00	$15 00	67,135 48	68 00
9	Cass	106,793 37	. . .	462 62	. .	107,255 99	462 62
10	Clark	98,195 05	232 00	341 39	100 00	98,868 44	675 39
11	Clay	94,942 02	250 95	210 50	. . .	95,403 47	461 45
12	Clinton	93,965 00	400 01	106 03	1,074 40	95,545 44	1,580 44
13	Crawford	45,648 48	55 00	63 90	. . . .	45,767 38	118 90
14	Daviess	84,877 31	419 00	392 22	100 00	85,788 53	911 22
15	Dearborn	102,404 09	70 02	. . .	2 00	102,476 11	72 02
16	Decatur	83,539 22	31 50	517 17	. . .	84,087 89	548 67
17	Dekalb	81,697 61	53 80	58 . 50	. .	82,335 01	637 40
18	Delaware	115,090 34	325 79	1,510 54	. .	116,926 67	1,836 33
19	Dubois	71,559 19	994 28	186 00	. . .	72,739 47	1,180 28
20	Elkhart	129,472 80	76 95	980 00	. . .	130,529 83	1,056 95
21	Fayette	51,965 44	162 01	70 00	89 31	52,286 76	321 32
22	Floyd	86,723 18	93 60	4 30	25 00	86,846 08	122 90
23	Fountain	72,871 33	151 20	109 50	.	73,132 03	260 70
24	Franklin	76,803 67	. . . .	. . .	.	76,803 67	. . .
25	Fulton	52,494 91	55 00	278 21	. . . .	52,828 22	333 31
26	Gibson	91,592 18	413 00	246 53	. . .	92,251 71	659 53
27	Grant	118,361 86	179 00	923 75	1,706 01	121,170 62	2,808 76
28	Greene	93,023 36	. . .	139 50	. .	93,162 86	139 50
29	Hamilton	92,103 92	. .	235 03	. . . .	92,338 95	235 03
30	Hancock	68,482 37	512 50	174 00	. . .	69,168 87	686 50
31	Harrison	74,185 60	70 00	19 75	61 69	*74,317 02	151 44
32	Hendricks	85,495 52	17 00	83 06	. . . . .	85,595 58	100 06
33	Henry	105,281 14	. . .	280 82	. .	105,561 96	280 82
34	Howard	77,637 15	25 00	368 54	121 85	78,092 54	455 39
35	Huntington	86,328 95	47 00	3 00	. . . .	86,378 95	50 00
36	Jackson	85,781 72	219 07	63 00	32 93	86,096 72	315 00
37	Jasper	36,961 18	50 50	85 00	. . . .	37,096 68	135 50
38	Jay	79 581 69	109 00	138 50	. . . .	79,829 19	247 50
39	Jefferson	110,463 40	368 02	111 54	. . . .	110,942 96	479 56
40	Jennings	58,898 49	. . . .	146 04	. . .	59,044 53	146 04
41	Johnson	76,650 29	16 00	142 51	.	76,808 80	158 51
42	Knox	115,506 80	1,562 84	329 69	100 00	117,499 33	1,992 53
43	Kosciusko	103,070 06	273 11	310 85	. . . .	103,654 02	583 96
44	Lagrange	56,942 26	624 00	63 50	. . . .	57,629 76	687 50

*$20.02 deducted on account of error in 1901 report.

COMMON SCHOOL FUND, 1901–1902—Continued.

Number.	COUNTIES.	Amount Held by Counties as Reported June, 1901.	Amount Added by Fines from County Clerks, 1902.	Amount Added by Fines from Justices of the Peace, 1902.	Amount Added from All Other Sources, 1902.	Amount Held by Counties, 1902.	Increase in Common School Fund, 1902.
45	Lake	$73,940 10	$860 00	$796 23	$124 08	$75,720 41	$1,780 31
46	Laporte	109,136 28	269 10			109,405 38	269 10
47	Lawrence	68,116 03	425 50	318 89		68,860 42	743 39
48	Madison	109,008 92		535 75	240 00	109,784 67	775 75
49	Marion	474,442 51		206 33	5,580 25	480,529 09	5,786 58
50	Marshall	81,435 23		402 55		81,837 78	402 55
51	Martin	41,863 70	176 47	141 55		42,181 72	318 02
52	Miami	99,134 33	577 35	148 00	90 00	99,949 68	815 35
53	Monroe	64,438 19	121 11	73 33	35 00	64,667 63	229 44
54	Montgomery	116,492 87	29 95	346 03		116,868 85	375 98
55	Morgan	77,611 02		200 00		77,811 02	200 00
56	Newton	25,715 63	82 00	48 00		25,845 63	130 00
57	Noble	84,171 19	101 25	22 66		84,295 10	123 91
58	Ohio	24,511 47		104 25		24,615 72	104 25
59	Orange	52,798 34	112 00	310 27		53,220 61	422 27
60	Owen	64,788 37	48 00	96 51		64,932 88	144 51
61	Parke	71,528 72	430 30			71,959 02	430 30
62	Perry	62,750 81	126 75	361 83		63,239 39	488 38
63	Pike	68,506 92	748 00	326 25		69,581 17	1,074 25
64	Porter	62,939 93		39 00		62,978 93	39 00
65	Posey	107,655 68		49 00		107,704 68	49 00
66	Pulaski	32,941 92		40 00	10 75	32,992 67	50 75
67	Putnam	94,525 90		137 50		94,663 40	137 50
68	Randolph	117,975 08		686 50		118,661 58	586 50
69	Ripley	85,023 78	268 00	96 43		*85,261 21	364 43
70	Rush	86,773 52	1,569 40			88,342 92	1,569 40
71	Scott	29,776 79	22 00	72 00		29,870 79	94 00
72	Shelby	97,596 60	166 10	146 87		97,909 57	312 97
73	Spencer	79,419 02	8 00	164 50		79,591 52	172 50
74	Starke	19,737 55	575 00	36 26		20,348 81	611 26
75	St. Joseph	131,190 98	368 00	1,762 23		133,321 21	2,130 23
76	Steuben	52,644 66		8 00		52,652 66	8 00
77	Sullivan	84,661 85	690 00	424 83		85,776 68	1,114 83
78	Switzerland	51,348 99	24 01	85 08	5 50	51,463 58	114 59
79	Tippecanoe	145,048 02		498 48		145,546 50	498 48
80	Tipton	56,581 35	122 00	131 50		56,834 85	253 50
81	Union	34,383 03	28 00	61 90		34,472 93	89 90
82	Vanderburgh	218,856 07	560 10	856 40		220,272 57	1,416 50
83	Vermillion	56,401 58	281 00	89 02	12 00	56,783 60	382 02
84	Vigo	164,096 97		1,216 12		165,313 09	1,216 12
85	Wabash	99,604 63	212 07			99,816 70	212 07
86	Warren	46,790 29	25 50			46,815 79	25 50
87	Warrick	76,277 87	30 50	202 51		76,510 88	233 01
88	Washington	74,136 72	108 00	108 50		74,353 22	216 50
89	Wayne	178,590 32	35 00	1,058 02	100 00	179,783 34	1,193 02
90	Wells	69,620 90	80 00	82 00	81 00	69,863 90	243 00
91	White	48,501 97	610 52			49,112 49	610 52
92	Whitley	60,711 90	85 00	43 50		60,840 40	128 50
	Total	$7,925,579 50	$18,958 74	$24,485 69	$9,706 77	$7,978,580 68	

*$130.00 deducted on account of error in 1901 report.

CONGRESSIONAL TOWNSHIP FUND, 1901–1902.

Number.	COUNTIES.	No. Acres Unsold Land.	Value.	Amount of Fund Held by County, 1901.	Amount Since Added from Sale of Land.	Amount Added from Other Sources.	Total.	Deduct Amount to Other Counties and from Errors.	Total Fund, 1902.
1	Adams			$18,740 38			$18,740 38		$18,740 38
2	Allen			56,324 66			56,324 66		56,324 66
3	Bartholomew			57,545 76			57,545 76		57,545 76
4	Benton			38,441 83			38,441 83		38,441 83
5	Blackford			8,131 23			8,131 23		8,131 23
6	Boone			27,034 33			27,034 33		27,034 33
7	Brown			9,119 25			9,119 25		9,119 25
8	Carroll			32,912 58			32,912 58		32,912 58
9	Cass			31,839 08			31,839 08		31,839 08
10	Clark			18,263 08			18,263 08		18,263 08
11	Clay			10,864 72			10,864 72		10,864 72
12	Clinton			26,940 22			26,940 22		26,940 22
13	Crawford			11,686 85			11,686 85		11,686 85
14	Daviess			20,222 89			20,222 89		20,222 89
15	Dearborn			27,906 59		$5 00	27,911 59		27,911 59
16	Decatur			20,357 60			20,357 60		20,357 60
17	Dekalb			17,684 00			17,684 00		17,684 00
18	Delaware			19,198 18			19,198 18		19,198 18
19	Dubois			16,219 74			16,219 74		16,219 74
20	Elkhart			16,268 68			16,268 68		46,268 68
21	Fayette			*17,949 79			17,949 79		17,949 79
22	Floyd			22,688 50			22,688 50		22,688 50
23	Fountain			26,232 05			26,232 05		26,232 05
24	Franklin			57,718 32			57,718 32	$521 93	57,196 39
25	Fulton			21,832 73			21,832 73		21,832 73
26	Gibson			34,476 62			34,476 62		34,476 62
27	Grant			28,127 88			28,127 88		28,127 88
28	Greene			18,511 72			18,511 72		18,511 72

*$2.02 deducted on account of error in 1901 report.

29	Hamilton			29,497 16			29,497 16	29,497 16
30	Hancock			10,317 84			10,317 84	10,317 84
31	Harrison			31,903 99		57 64	31,846 35	31,846 35
32	Hendricks			23,673 77			23,673 77	23,673 77
33	Henry			22,702 94		11 96	22,690 98	22,690 98
34	Howard			22,235 65			22,235 65	22,235 65
35	Huntington			35,384 12			35,384 12	35,384 12
36	Jackson			16,260 29			16,260 29	16,260 29
37	Jasper	640	$9,000 00	48,411 93			48,411 93	48,411 93
38	Jay			22,601 49			22,601 49	22,601 49
39	Jefferson			32,046 20			32,046 20	32,046 20
40	Jennings			12,125 39			12,125 39	12,125 39
41	Johnson			17,843 28			17,843 28	17,843 28
42	Knox			41,520 41			41,520 41	41,520 41
43	Kosciusko			27,303 48			27,303 48	27,303 48
44	Lagrange			17,576 80			17,576 80	17,576 80
45	Lake			33,154 75			33,154 75	33,154 75
46	Laporte			55,299 35			55,299 35	55,299 35
47	Lawrence			14,969 20			14,969 20	14,969 20
48	Madison			24,976 17			24,976 17	24,976 17
49	Marion			16,571 01			16,571 01	16,571 01
50	Marshall			21,589 71			21,589 71	21,589 71
51	Martin			13,260 43			13,260 43	13,260 43
52	Miami			30,663 86			30,663 86	30,663 86
53	Monroe			32,988 10			32,988 10	32,988 10
54	Montgomery			22,884 30			22,884 30	22,884 30
55	Morgan			19,742 06			19,742 06	19,742 06
56	Newton	160	1,600 00	48,268 49			48,268 49	48,268 49
57	Noble	5	300 00	19,850 17			19,850 17	19,850 17
58	Ohio			10,494 09			10,494 09	10,494 09
59	Orange			13,265 49			13,265 49	13,265 49
60	Owen			18,550 20			18,550 20	18,550 20
61	Parke			34,485 77			34,485 77	34,485 77
62	Perry			33,226 90	27 82	32 52	32,931 20	32,931 20
63	Pike			16,807 37			16,807 37	16,807 37
64	Porter			24,848 79			24,848 79	24,848 79
65	Posey			39,925 00			39,925 00	39,925 00
66	Pulaski			25,207 60			25,207 60	25,207 60
67	Putnam			24,785 82			24,785 82	24,785 82
68	Randolph			33,709 95			33,709 95	33,709 95

CONGRESSIONAL TOWNSHIP FUND, 1901–1902—Continued.

Number.	COUNTIES.	No. Acres Unsold Land.	Value.	Amount of Fund Held by County, 1901.	Amount Since Added from Sale of Land.	Amount Added From Other Sources.	Total.	Deduct Amount to Other Counties and from Errors.	Total Fund, 1902.
69	Ripley			$18,651 59			$18,651 59		$18,651 59
70	Rush			23,225 76		$615 18	23,840 94		23,840 94
71	Scott			8,553 54			8,553 54		8,553 54
72	Shelby			18,050 21			18,050 21		18,050 21
73	Spencer			26,121 51		323 52	26,445 03		26,445 03
74	Starke			15,075 13			15,075 13		15,075 13
75	St. Joseph			36,416 14			36,416 14		36,416 14
76	Steuben			16,774 68			16,774 68		16,774 68
77	Sullivan			15,462 26			15,462 26		15,462 26
78	Switzerland			18,792 19			18,792 19		18,792 19
79	Tippecanoe			39,287 03			39,287 03		39,287 03
80	Tipton			28,512 84			28,512 84		28,512 84
81	Union			28,678 88		744 26	29,423 14	$321 64	29,101 50
82	Vanderburgh	308.6	$24,688 00	21,290 78			21,290 78		21,290 78
83	Vermillion			33,953 67			33,953 67		33,953 67
84	Vigo			57,159 52			57,159 52		57,159 52
85	Wabash			32,621 35			32,621 35		32,621 35
86	Warren	11	400 00	57,884 44			57,884 44		57,884 44
87	Warrick			20,736 85			20,736 85		20,736 85
88	Washington			28,506 56			28,506 56		28,506 56
89	Wayne			44,191 26		747 14	44,938 40	668 40	44,270 00
90	Wells			25,837 23			25,837 23		25,837 23
91	White			46,950 44			46,950 44		46 950 44
92	Whitley			17,844 37			17,844 37		17,844 37
	Total	1,124.6	$35,988 00	$2,464,746 81		$2,462 92	$2,467,209 73	$1,905 09	$2,465,304 64

CONDITION COMMON SCHOOL FUND, 1901-1902.

Number.	COUNTIES.	Amount of Fund Safely Invested.	Amount Not Safely Invested	Amount Not Invested and in County Treasury.	Total.
1	Adams	$55,914 70		$2,588 28	$58,502 98
2	Allen	182,645 30	$2,390 00	18,751 46	203,786 76
3	Bartholomew	83,816 21		1,934 02	85,750 23
4	Benton	25,986 59		14,319 70	40,306 29
5	Blackford	36,561 24		3,715 99	40,277 23
6	Boone	95,114 95		4,848 52	99,963 47
7	Brown	32,537 79		891 77	33,429 56
8	Carroll	65,920 25		1,215 23	67,135 48
9	Cass	100,465 52		6,790 47	107,255 99
10	Clark	90,904 16	7,463 30	500 98	98,868 44
11	Clay	94,763 48		639 99	95,403 47
12	Clinton	93,181 68		2,363 76	95,545 44
13	Crawford	44,186 68		1,580 70	45,767 38
14	Daviess	84,769 41		1,019 12	85,788 53
15	Dearborn	96,866 52		5,609 59	102,476 11
16	Decatur	81,198 03		2,889 86	84,087 89
17	Dekalb	78,462 06		3,872 95	82,335 01
18	Delaware	116,289 59	300 00	337 08	116,926 67
19	Dubois	72,436 32		303 15	72,739 47
20	Elkhart	124,824 22		5,705 61	130,529 83
21	Fayette	51,561 68		725 08	52,286 76
22	Floyd	86,769 07		77 01	86,846 08
23	Fountain	71,563 75	1,500 00	68 28	73,132 03
24	Franklin	73,195 24	625 00	2,983 48	76,803 67
25	Fulton	51,453 92		1,374 30	52,828 22
26	Gibson	89,877 22		2,374 49	92,251 71
27	Grant	113,142 50		8,028 12	121,170 62
28	Greene	91,838 21		1,324 65	93,162 86
29	Hamilton	86,079 00	1,100 00	5,159 95	92,338 95
30	Hancock	68,087 16		1,081 71	69,168 87
31	Harrison	71,856 43	2,000 00	460 59	74,317 02
32	Hendricks	75,307 09		10,288 49	85,595 58
33	Henry	97,182 45		8,379 51	105,561 96
34	Howard	77,677 32		415 22	78,092 54
35	Huntington	83,465 97		2,912 98	86,378 95
36	Jackson	84,794 75		1,301 97	86,096 72
37	Jasper	36,335 48		761 20	37,096 68
38	Jay	65,225 54	1,150 00	13,453 65	79,829 19
39	Jefferson	108,490 07		2,452 89	110,942 96
40	Jennings	52,148 66	1,000 00	5,895 87	59,044 53
41	Johnson	75,119 23		1,689 57	76,808 80
42	Knox	115,331 80		2,167 53	117,499 33
43	Kosciusko	97,813 72		5,840 30	103,654 02
44	Lagrange	38,732 90		18,896 86	57,629 76
45	Lake	53,621 32		22,099 09	75,720 41
46	Laporte	73,621 97		35,783 41	109,405 38
47	Lawrence	66,923 29		1,937 13	68,860 42
48	Madison	103,271 55	2,771 00	3,742 12	109,784 67
49	Marion	367,682 14		112,846 95	480,529 09
50	Marshall	80,023 48		1,814 30	81,837 78
51	Martin	42,181 72			42,181 72
52	Miami	96,239 33		3,710 35	99,949 68

CONDITION COMMON SCHOOL FUND, 1901–1902—Continued.

Number.	COUNTIES.	Amount of Funds Safely Invested.	Amount Not Safely Invested.	Amount Not Invested and in County Treasury.	Total.
53	Monroe	$61,037 36	$2,625 00	$1,005 27	$64,667 63
54	Montgomery	81,141 66		35,727 19	116,868 85
55	Morgan	77,123 77		687 25	77,811 02
56	Newton	24,947 48		898 15	25,845 63
57	Noble	82,010 16		2,284 94	84,295 10
58	Ohio	24,465 76		149 96	24,615 72
59	Orange	51,302 51		1,918 10	53,220 61
60	Owen	63,775 80		1,157 08	64,932 88
61	Parke	68,534 08	340 00	3,084 94	71,959 02
62	Perry	58,625 85	2,826 59	1,786 95	63,239 39
63	Pike	68,535 68	384 00	661 49	69,581 17
64	Porter	58,681 13		4,297 80	62,978 93
65	Posey	106,620 53		1,084 15	107,704 68
66	Pulaski	32,816 79		175 88	32,992 67
67	Putnam	94,231 13	100 00	332 27	94,663 40
68	Randolph	116,090 78		2,570 80	118,661 58
69	Ripley	67,844 38	3,413 00	14,003 83	85,261 21
70	Rush	76,226 25		12,116 67	88,342 92
71	Scott	29,375 78	200 00	295 01	29,870 79
72	Shelby	96,975 63		933 94	97,909 57
73	Spencer	76,877 85		2,713 67	79,591 52
74	Starke	20,123 62		225 19	20,348 81
75	St Joseph	102,630 00		30,691 21	133,321 21
76	Steuben	51,275 00		1,377 66	52,652 66
77	Sullivan	85,528 02		248 66	85,776 68
78	Switzerland	50,900 19		473 39	51,463 58
79	Tippecanoe	143,142 67		2,403 83	145,546 50
80	Tipton	56,024 10		810 75	56,834 85
81	Union	28,689 40		5,783 53	34,472 93
82	Vanderburgh	216,310 87		3,961 70	220,272 57
83	Vermillion	56,783 60			56,783 60
84	Vigo	161,364 71		3,948 38	165,313 09
85	Wabash	98,584 04		1,232 66	99,816 70
86	Warren	46,302 03	130 00	383 76	46,815 79
87	Warrick	76,266 63		244 25	76,510 88
88	Washington	73,979 15		374 07	74,353 22
89	Wayne	140,762 33		39,021 01	179,783 34
90	Wells	69,863 90			69,863 90
91	White	49,112 49			49,112 49
92	Whitley	56,391 66		4,448 74	60,840 40
	Total	$7,405,823 43	$29,317 89	$543,439 36	$7,978,580 68

CONDITION CONGRESSIONAL TOWNSHIP FUND, 1901–1902.

Number.	COUNTIES.	Amount of Fund Safely Invested	Amount of Fund Not Safely Invested.	Amount Not Invested and in County Treasury.	Total.
1	Adams	$17,446 24		$1,294 14	$18,740 38
2	Allen	54,063 33		2,261 33	56,324 66
3	Bartholomew	54,001 19		3,544 57	57,545 76
4	Benton	24,330 75		14,111 08	38,441 83
5	Blackford	6,018 05		2,113 18	8,131 23
6	Boone	18,145 33		8,889 00	27,034 33
7	Brown	8,918 66		200 59	9,119 25
8	Carroll	30,844 59		2,067 99	32,912 58
9	Cass	30,063 56		1,775 52	31,839 08
10	Clark	17,027 01	$1,153 20	82 87	18,263 08
11	Clay	10,864 72			10,864 72
12	Clinton	24,463 72		2,476 50	26,940 22
13	Crawford	11,686 85			11,686 85
14	Daviess	19,359 62		863 27	20,222 89
15	Dearborn	27,402 42	509 17		27,911 59
16	Decatur	17,835 00		2,522 60	20,357 60
17	Dekalb	17,684 00			17,684 00
18	Delaware	18,918 51		279 67	19,198 18
19	Dubois	15,947 07		272 67	16,219 74
20	Elkhart	44,444 84		1,823 84	46,268 68
21	Fayette	13,960 00		3,989 79	17,949 79
22	Floyd	21,896 01		792 49	22,688 50
23	Fountain	24,701 24	1,294 80	236 01	26,232 05
24	Franklin	53,909 11	750 00	2,537 28	57,196 39
25	Fulton	21,257 73		575 00	21,832 73
26	Gibson	29,888 36		4,588 26	34,476 62
27	Grant	27,820 76		307 12	28,127 88
28	Greene	18,131 84		379 88	18,511 72
29	Hamilton	25,324 64	262 50	3,910 02	29,497 16
30	Hancock	10,317 84			10,317 84
31	Harrison	29,827 25	1,500 00	519 10	31,846 35
32	Hendricks	13,685 55		9,988 22	23,673 77
33	Henry	14,653 46		8,037 52	22,690 98
34	Howard	21,953 92		281 73	22,235 65
35	Huntington	28,094 00		7,290 12	35,384 12
36	Jackson	15,642 29	275 00	343 00	16,260 29
37	Jasper	46,744 53		1,667 40	48,411 93
38	Jay	21,673 18		928 31	22,601 49
39	Jefferson	30,123 31		1,922 89	32,046 20
40	Jennings	10,675 00	799 23	654 16	12,125 39
41	Johnson	15,309 00		2,534 28	17,843 28
42	Knox	41,317 02		203 39	41,520 41
43	Kosciusko	24,342 22		2,961 26	27,303 48
44	Lagrange	10,869 65		6 707 15	17,576 80
45	Lake	21,458 43		11,696 32	33,154 75
46	Laporte	21,787 00		33,512 35	5,299 35
47	Lawrence	13,750 21		1,218 99	14,969 20
48	Madison	24,741 32		234 85	24,976 17
49	Marion	8,882 51		7,688 50	16,571 01
50	Marshall	20,689 48		900 23	21,589 71
51	Martin	12,557 30		703 13	13,260 43
52	Miami	29,925 46		738 40	30,663 86

CONDITION CONGRESSIONAL TOWNSHIP FUND, 1901-1902—Continued.

Number.	COUNTIES.	Amount of Fund Safely Invested.	Amount of Fund Not Safely Invested.	Amount Not Invested and in County Treasury.	Total.
53	Monroe	$31,053 56	$1,860 00	$74 54	$32,988 10
54	Montgomery	10,411 88		12,472 42	22,884 30
55	Morgan	19,742 06			19,742 06
56	Newton	44,522 70		3,745 79	48,268 49
57	Noble	18,367 85		1,482 32	19,850 17
58	Ohio	9,881 17		612 92	10,494 09
59	Orange	13,123 16		142 33	13,265 49
60	Owen	18,299 65		250 55	18,550 20
61	Parke	32,032 08		2,453 69	34,485 77
62	Perry	27,452 08	4,396 20	1,082 92	32,931 20
63	Pike	16,769 37		48 00	16,807 37
64	Porter	21,966 65		2,882 14	24,848 79
65	Posey	36,646 17		3,278 83	39,925 00
66	Pulaski	24,302 81		904 79	25,207 60
67	Putnam	21,223 00		562 82	24,785 82
68	Randolph	29,800 27		3,909 68	33,709 95
69	Ripley	11,135 23	977 85	6,538 51	18,651 59
70	Rush	16,768 07	750 00	6,322 87	23,840 94
71	Scott	8,553 54			8,553 54
72	Shelby	16,826 63		1,223 58	18,050 21
73	Spencer	26,029 86	87 50	327 67	26,445 03
74	Starke	14,817 67		257 46	15,075 13
75	St. Joseph	24,952 00		11,464 14	36,416 14
76	Steuben	13,392 33		3,382 35	16,774 68
77	Sullivan	15,462 26			15,462 26
78	Switzerland	17,583 42		1,208 77	18,792 19
79	Tippecanoe	32,233 08		7,053 95	39,287 03
80	Tipton	27,924 10		588 74	28,512 84
81	Union	22,561 79		6,539 71	29,101 50
82	Vanderburgh	13,461 31		7,829 47	21,290 78
83	Vermillion	33,213 02		740 65	33,953 67
84	Vigo	56,416 88		742 64	57,159 52
85	Wabash	32,007 64		613 71	32,621 35
86	Warren	57,393 86	93 00	397 58	57,884 44
87	Warrick	20,157 24		579 61	20,736 85
88	Waghington	27,798 86		707 70	28,506 56
89	Wayne	22,953 38		21,316 62	44,270 00
90	Wells	23,227 98		2,609 25	25,837 23
91	White	46,118 63		831 81	46,950 44
92	Whitley	17,254 27		590 10	17,844 37
	Total	$2,172,202 59	$14,718 45	$278,383 60	$2,465,304 64

SCHOOL REVENUE, YEAR ENDING JULY 31, 1902.

Tuition Revenue, January Distribution, 1902.

Number.	COUNTIES.	Congressional Township Revenue.	Common School Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Total Distributed.
1	Adams	$373 91	$9,882 88	$5,543 27		$15,800 06
2	Allen	2,795 95	31,516 16	19,055 24	$9,200 00	62,567 35
3	Bartholomew	1,585 83	9,081 60	10,849 93	2,100 00	23,417 36
4	Benton	1,153 25	5,094 56	11,349 38	2,500 00	20,097 19
5	Blackford	437 87	6,754 56	7,573 36	2,200 00	16,965 79
6	Boone	977 76	10,071 04	12,192 44	1,200 00	24,441 24
7	Brown	184 10	4,291 84	2,243 06		6,719 00
8	Carroll	1,224 75	7,684 66	12,744 28	800 00	22,453 79
9	Cass	1,039 54	13,214 72	12,612 96	2,300 00	29,167 22
10	Clark	540 15	12,606 72	12,244 01	4,733 33	30,124 21
11	Clay	325 94	14,444 80	5,218 81	5,737 00	25,726 55
12	Clinton	727 46	10,734 08	16,407 14	1,300 00	29,168 68
13	Crawford	361 21	6,667 52	1,320 65	900 00	9,249 38
14	Daviess	713 37	12,819 84	7,025 91	3,400 00	23,959 12
15	Dearborn	1,220 29	8,775 68	7,216 30	2,733 33	20,045 60
16	Decatur	478 00	7,240 96	12,466 02	2,200 00	22,384 98
17	Dekalb	461 04	9,376 00	7,957 36	1,100 00	18,894 40
18	Delaware	762 33	18,202 88	28,087 60	6,204 44	53,257 25
19	Dubois	973 18	9,725 44	2,613 51	3,300 00	16,612 13
20	Elkhart	1,388 06	16,136 96	18,968 88	4,362 50	40,856 40
21	Fayette	166 29	4,483 84	6,337 66	1,669 87	12,657 66
22	Floyd	601 11	11,147 52	1,944 92	5,750 00	19,443 55
23	Fountain	507 46	8,399 36		2,500 00	11,406 82
24	Franklin	2,351 46	6,362 88	4,841 18	1,117 80	14,673 32
25	Fulton	659 96	7,041 28	7,277 79	1,200 00	16,179 03
26	Gibson	1,034 30	12,298 24	11,867 62	1,449 46	26,649 62
27	Grant	381 87	21,408 00	22,160 80	6,880 60	50,831 27
28	Greene	581 00	12,371 20	8,641 20	2,600 00	24,193 40
29	Hamilton	884 91	11,513 52	10,969 88	1,450 00	24,818 31
30	Hancock	468 81	7,406 08	11,316 58	1,600 00	20,791 47
31	Harrison	1,090 05	9,111 04	4,635 71	1,200 00	16,036 80
32	Hendricks	767 11	7,869 83	13,600 28	400 00	22,637 22
33	Henry	1,144 63	8,890 88	14,454 62	1,800 00	26,290 13
34	Howard	667 07	10,814 72	11,971 84	2,400 00	25,853 63
35	Huntington	1,023 05	11,184 76	14,228 97	2,158 92	28,595 70
36	Jackson	288 75	10,664 96	7,002 95	3,500 00	21,456 66
37	Jasper	1,283 04	6,049 28	9,215 46	900 00	17,447 78
38	Jay	756 09	10,661 12	11,263 25	1,300 00	23,980 46
39	Jefferson	949 14	8,972 80	7,038 25	3,050 00	20,010 19
40	Jennings	241 91	6,037 76	5,396 13	1,700 00	13,375 80
41	Johnson	535 29	7,573 76	11,578 15	800 00	20,487 20
42	Knox	773 74	13,489 92	9,549 93	4,312 50	28,126 09
43	Kosciusko	91 94	11,221 76	12,767 52	1,400 00	25,482 22
44	Lagrange	873 60	5,888 00	6,868 24	1,200 00	14,829 84
45	Lake	800 18	15,403 52	15,812 95	12,300 00	44,316 65
46	Laporte	1,956 18	15,119 36	16,384 07	6,600 00	40,059 61
47	Lawrence	449 08	9,735 88	7,694 40	1,900 00	19,779 36
48	Madison	749 28	26,919 68	34,533 82	9,900 00	72,102 78
49	Marion	771 60	61,449 00	241,570 52	28,120 84	331,911 96
50	Marshall	695 38	10,037 76	10,275 84	1,500 00	22,508 98
51	Martin	795 62	6,322 56	2,833 70	300 00	10,251 88
52	Miami	806 67	11,102 72	15,126 54	1,800 00	28,835 93

SCHOOL REVENUE, YEAR ENDING JULY 31, 1902—Continued.

Tuition Revenue, January Distribution, 1902—Continued.

Number.	COUNTIES.	Congressional Township Revenue.	Common School Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Total Distributed.
53	Monroe	$739 05	$8,084 28	$7,132 78	$456 46	$16,412 57
54	Montgomery	905 06	10,752 60	19,486 79	2,200 00	33,343 85
55	Morgan	1,184 52	7,716 32	11,602 51	1,500 00	22,003 35
56	Newton	1,448 05	4,030 73	7,930 01	1,000 00	14,408 79
57	Noble	651 90	8,337 92	9,049 45	2,000 00	20,039 27
58	Ohio	258 65	1,803 52	2,051 14	300 00	4,413 31
59	Orange	574 74	7,836 60	3,698 44	1,000 00	13,109 78
60	Owen	489 56	6,150 40	5,736 80	651 39	13,028 15
61	Parke	1,097 77	8,622 08	12,128 63	1,800 00	23 648 48
62	Perry	240 65	8,744 96	1,033 41	3,000 00	13,019 02
63	Pike	512 75	8,988 16	4,531 17	800 00	14,832 08
64	Porter	899 27	7,328 00	13,341 93	2,900 00	21,469 20
65	Posey	1,003 32	9,297 92	9,709 71	3,500 00	23,510 95
66	Pulaski	756 23	6,214 40	6,799 89	900 00	14,670 52
67	Putnam	960 32	7,832 32	12,701 13	400 00	21,893 77
68	Randolph	1,322 60	10,737 92	14,100 55	500 00	26,661 07
69	Ripley	536 54	7,908 12	3,024 51	2,300 00	13,769 17
70	Rush	796 90	6,664 96	10,539 74	1,011 55	19,013 15
71	Scott	256 61	3,582 72	1,898 43	100 00	5,837 76
72	Shelby	541 50	9,729 28	15,313 93	1,900 00	27,484 71
73	Spencer	1,113 40	9,351 68	4,967 65	3,200 00	18,632 73
74	Starke	301 51	4,567 04	4,174 50	1,700 00	10,743 05
75	St. Joseph	1,192 03	22,135 04	14,551 90	11,139 75	49,018 72
76	Steuben	503 24	5,216 00	6,958 76	400 00	13,078 00
77	Sullivan	527 73	10,604 80	11,080 54	1,500 00	23,713 07
78	Switzerland	1,127 53	4,375 04	2,895 47	300 00	8,698 04
79	Tippecanoe	933 82	15,498 24	23,012 49	7,000 00	46,444 55
80	Tipton	408 00	7,792 64	7,270 44	1,000 00	16,471 08
81	Union	1,362 05	2,132 48	5,691 94	500 00	9,686 47
82	Vanderburgh	638 72	26,833 92	30,431 36	16,700 00	74,604 00
83	Vermillion	1,764 88	5,798 40	8,930 55	2,000 00	18,493 83
84	Vigo	1,689 90	24,934 65	34,619 96	8,035 00	69,279 51
85	Wabash	978 64	11,555 84	18,333 43	1,473 72	32,341 63
86	Warren	1,736 51	4,258 56	8,127 61	345 00	14,467 68
87	Warrick	634 21	9,306 88	4,909 40	1,713 70	16,564 19
88	Washington	951 67	8,047 28	7,380 34	700 00	17,079 29
89	Wayne	1,855 25	12,733 44	28,173 14	3,500 00	46,261 83
90	Wells	800 23	9,418 24	7,700 93	1,900 00	19,819 40
91	White	1,114 29	7,533 26	11,078 34	1,200 00	20,925 89
92	Whitley	361 97	6,951 68	8,772 87	458 35	16,544 87
	Total	$77,842 13	$970,683 61	$1,203,823 55	$264,015 51	$2,516,364 80

SCHOOL REVENUE, YEAR ENDING JULY 31, 1902—Continued.

Tuition Revenue, July Distribution, 1901.

Number.	COUNTIES.	Common School Revenue.	Congressional Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Dog Fund Revenue.	Total Distribution.
1	Adams.	$11,450 86	$747 89	$8,830 91	$2,950 00	$1,043 69	$25,023 25
2	Allen	35,978 80	582 44	29,494 48	16,200 00	1,856 65	84,112 37
3	Bartholomew	10,249 00	1,714 81	16,356 64	1,100 00	1,689 95	31,110 40
4	Benton	5,785 32	1,153 25	15,016 63	800 00	429 99	23,185 19
5	Blackford	7,996 44	50 00	9,599 81	2,300 00	318 25	20,264 50
6	Boone	11,160 68	438 40	13,315 19	400 00	1,208 14	26,522 41
7	Brown.	4,673 89	145 62	3,449 08	.	419 43	8,687 97
8	Carroll.	8,755 68	750 00	14,472 42	800 00	443 35	25,221 45
9	Cass	14,999 80	728 50	16,657 68	3,250 00	597 29	36,233 27
10	Clark	13,470 80	285 74	17,436 15	2,100 00	1,644 70	34,937 39
11	Clay	16,226 72	325 94	11,990 06	2,700 00	1,729 69	32,972 41
12	Clinton	12,577 04	655 85	20,030 33	1,600 00	1,468 40	36,331 62
13	Crawford	7,531 72	350 10	3,237 77	2,000 00	672 00	11,991 59
14	Daviess	14,804 44	200 00	13,530 60	2,906 85		31,441 89
15	Dearborn	10,237 16	291 60	13,729 50	1,400 00	1,677 60	27,335 86
16	Decatur	8,114 84	552 83	15,971 50	1,200 00	547 31	26,386 48
17	Dekalb	11,062 32	600 00	15,847 65	1,700 00	. . . . .	29,149 97
18	Delaware	21,164 00	354 32	35,898 27	5,979 82	.	63,396 41
19	Dubois.	11,219 88		6,909 36	1,800 00	2,040 21	21,969 45
20	Elkhart	18,961 76	1,388 06	35,489 79	1,191 67	2,139 34	59,170 62
21	Fayette	5,317 64	606 60	8,190 87	900 00	1,096 90	16,112 01
22	Floyd	12,970 72	615 36	3,701 61	4,200 00	1,355 50	22,843 19
23	Fountain	9,642 20	548 00		2,400 00	837 81	13,428 01
24	Franklin	7,192 80	999 18	7,593 73	1,700 00	1,657 50	18,643 21
25	Fulton.	8,142 96	650 00	11,284 99	700 00	584 22	21,362 17
26	Gibson.	14,546 92	1,034 30	16,706 18	1,900 00	2,144 45	36,331 85
27	Grant	26,529 00	631 07	27,672 43	7,324 17	2,106 60	64,263 27
28	Greene.	14,452 20	460 94	13,789 10	1,600 00	1,022 77	31,325 01
29	Hamilton	13,296 32	884 91	20,294 70	1,000 00	1,044 23	36,520 16
30	Hancock	8,804 52	127 63	15,516 68	900 00	739 97	26,088 80
31	Harrison	10,583 48	631 44	9,684 96	1,200 00	1,837 08	23,936 96
32	Hendricks.	9,017 64	919 80	14,031 29	100 00	. . . . .	24,068 73
33	Henry	10,161 68	207 60	17,846 74	200 00	883 54	29,299 56
34	Howard	12,862 68	667 07	17,141 17	1,400 00	1,469 22	33,540 14
35	Huntington	12,981 08	700 00	20,788 15	1,100 00	18 00	35,587 23
36	Jackson	12,023 52	578 20	12,219 63	2,200 00	1,844 23	28,865 58
37	Jasper.	6,966 36	1,467 79	13,939 13	900 00	1,307 27	24,580 55
38	Jay	12,062 00	670 00	16,960 78	2,325 00	805 89	31,923 67
39	Jefferson	10,351 12	915 45	13,789 71	1,100 00	1,296 50	27,452 78
40	Jennings	6,836 12	267 96	9,657 58	800 00	795 85	18,357 51
41	Johnson	8,598 80	535 29	14,538 30	681 07	200 97	24,554 43
42	Knox	16,567 12	1,645 53	14,237 83	2,534 75	. .	34,985 23
43	Kosciusko.	12,883 40	618 53	20,387 65	1,550 00	1,907 80	37,377 38
44	Lagrange	6,876 08	71 76	14,668 82	300 00	860 30	22,776 96
45	Lake.	19,055 00	821 27	31,338 58	12,600 00	. .	63,814 85
46	Laporte	18,188 16	1,139 13	24,546 73	4,300 00	1,525 83	49,999 85
47	Lawrence	1,800 00	449 08	9,721 72	1,200 00	948 75	14,119 55
48	Madison	32,277 32	749 28	9,200 00	49,228 74	1,913 49	93,368 83
49	Marion	72,203 28	325 54	324,349 43	28,200 00	8,611 70	433,689 95
50	Marshall.	11,055 00	532 10	19,032 47	1,300 00	874 20	33,393 77
51	Martin.	7,454 76	. .	6,213 93	400 00	469 80	14,538 49
52	Miami	13,371 80	516 06	17,461 28	3,200 00	1,130 61	35,679 75

SCHOOL REVENUE, YEAR ENDING JULY 31, 1902—Continued.

Tuition Revenue, July Distribution, 1901—Continued.

Number.	COUNTIES.	Common School Revenue.	Congressional Revenue.	Local Tuition Revenue.	Liquor License Revenue.	Dog Fund Revenue.	Total Distribution.
53	Monroe	$9,779 92	$1,078 72	$12,489 90	$800 00	$1,540 68	$25,689 22
54	Montgomery	12,334 32	827 99	23,613 85	800 00	670 98	38,247 14
55	Morgan	9,102 00		14,047 49		1,319 50	24,468 99
56	Newton	4,718 24	1,448 05	11,471 48	1,200 00	553 77	19,391 54
57	Noble	9,622 96	91 12	18,776 47	1,100 00	1,102 97	30,693 52
58	Ohio	2,033 52	370 00	2,785 26	100 00	272 75	5,561 53
59	Orange	5,030 48	257 57	7,601 05	500 00	904 94	17,294 04
60	Owen	6,916 04	507 23	8,859 64	500 00	349 34	17,132 25
61	Parke	9,927 84	876 86	14,490 24	2,100 00	1,082 69	28,477 63
62	Perry	10,212 00	1,920 80	4,840 66	2,200 00		19,173 46
63	Pike	10,351 12	405 43	7,990 69	600 00	1,023 45	20,370 69
64	Porter	8,425 64	423 58	22,579 62	600 00	1,066 32	33,095 16
65	Posey	10,140 96	1,008 39	14,551 34	1,916 67	1,887 60	29,504 96
66	Pulaski	7,294 92	756 22	8,978 40	1,200 00	708 30	18,937 84
67	Putnam	8,890 36	1,391 54	17,350 97	800 00		28,432 87
68	Randolph	12,661 40	700 00	19,759 36	800 00	1,491 94	35,412 70
69	Ripley	9,032 44	756 31	7,895 32	2,500 00	1,539 36	21,723 43
70	Rush	7,741 88	984 10	16,941 39	500 00	651 19	26,818 56
71	Scott	4,035 96	256 61	3,360 71	400 00	544 90	8,598 18
72	Shelby	11,175 48	423 72	21,424 60	1,500 00		34,523 80
73	Spencer	10,889 84	311 17	10,805 97	1,600 00	2,763 81	26,370 79
74	Starke	5,304 32	603 00	7,698 89	700 00	676 30	14,982 51
75	St. Joseph	26,740 64	874 12	29,806 26	6,700 00	1,991 90	66,112 92
76	Steuben	5,976 24	503 24	13,617 24		880 15	20,976 87
77	Sullivan	12,411 28	400 00	14,603 65	800 00	1,005 05	29,219 98
78	Switzerland	4,798 16		4,309 09	700 00	684 18	10,491 43
79	Tippecanoe	17,665 28	947 35	31,301 36	2,700 00	1,308 25	53,922 24
80	Tipton	8,581 04	679 19	9,648 39	1,100 00	461 26	20,469 88
81	Union	2,406 48	487 68	6,378 98	200 00	551 00	10,024 14
82	Vanderburgh	31,260 56	638 00	50,075 56	14,100 00	2,660 55	98,734 67
83	Vermillion	6,827 24	272 34	11,191 09	1,400 00	954 00	20,644 67
84	Vigo	29,315 84	1,739 67	48,870 94	9,985 25	2,239 75	92,151 45
85	Wabash	16,017 02	978 64	26,143 15	1,764 19	1,122 35	46,025 35
86	Warren	4,642 76	1,736 51	11,589 63	500 00	751 44	19 220 34
87	Warrick	10,627 88	600 00	9,173 38	500 00		20,901 26
88	Washington	9,150 84	711 90	10,215 00	200 00	1,513 75	21,791 49
89	Wayne	15,011 64	490 73	36,058 11	2,940 83	1,739 94	56,241 25
90	Wells	10,741 84	594 66	18,474 41	1,300 00	764 56	31,875 47
91	White	8,508 52	1,295 50	16,383 69	800 00	1,072 97	28,060 68
92	Whitley	7,923 92	537 30	13,618 07	800 00	719 74	23,599 03
	Total	$1,119,561 50	$61,217 46	$1,732,641 29	$258,429 01	$101,788 60	$3,273,637 86

SPECIAL SCHOOL REVENUE, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	December Settlement, 1901.	May Settlement, 1902.	Total.
1	Adams	$10,064 11	$13,070 96	$23,135 07
2	Allen	33,896 53	44,217 77	78,114 30
3	Bartholomew	12,912 19	16,762 24	29,674 43
4	Benton	11,511 18	16,478 66	27,989 84
5	Blackford	8,532 06	12,755 58	21,287 64
6	Boone	14,246 40	18,226 62	32,473 02
7	Brown	1,498 19	2,094 87	3,593 06
8	Carroll	11,606 37	17,589 13	29,195 50
9	Cass	17,422 08	31,177 35	48,599 43
10	Clark	10,308 94	15,640 66	25,949 60
11	Clay	8,442 26	15,811 14	23,253 40
12	Clinton	15,224 96	23,207 91	38,432 87
13	Crawford	2,917 37	4,346 67	7,264 04
14	Daviess	12,188 98	17,600 23	29,789 21
15	Dearborn	6,306 30	12,160 24	18,466 54
16	Decatur	6,335 60	11,918 76	18,254 36
17	Dekalb	10,423 39	16,502 10	26,925 49
18	Delaware	34,820 62	48,058 72	82,879 34
19	Dubois	5,396 92	10,177 81	15,574 73
20	Elkhart	20,508 37	32,287 80	52,796 17
21	Fayette	6,109 68	8,518 11	14,627 79
22	Floyd	11,333 42	19,017 83	30,351 25
23	Fountain	18,825 78	24,293 58	43,119 36
24	Franklin	4,289 98	7,123 20	11,413 18
25	Fulton	11,457 01	15,124 94	26,581 95
26	Gibson	9,093 65	18,201 27	27,294 92
27	Grant	30,745 74	43,060 94	73,806 68
28	Greene	8,796 45	12,231 02	21,009 47
29	Hamilton	15,545 62	23,102 49	38,648 11
30	Hancock	12,966 11	17,176 99	30,143 10
31	Harrison	5,185 62	6,659 83	11,845 45
32	Hendricks	13,672 07	16,888 47	30,560 54
33	Henry	18,684 16	23,058 69	41,742 85
34	Howard	14,486 94	21,348 10	35,835 04
35	Huntington	14,051 79	24,843 68	38,895 47
36	Jackson	9,204 52	13,237 19	22,441 71
37	Jasper	8,105 40	14,057 93	22,163 33
38	Jay	11,134 72	17,423 73	28,558 45
39	Jefferson	5,617 86	10,194 60	15,812 46
40	Jennings	4,289 51	8,066 57	12,356 08
41	Johnson	9,278 85	15,035 58	24,314 43
42	Knox	15,772 36	21,658 94	37,431 30
43	Kosciusko	10,776 57	20,337 78	31,114 35
44	Lagrange	10,592 01	15,291 38	25,883 39
45	Lake	20,336 02	46,091 50	66,427 52
46	Laporte	18,440 45	27,613 80	46,054 25
47	Lawrence	9,323 95	13,510 25	22,834 20
48	Madison	44,066 99	58,624 00	102,690 99
49	Marion	12,797 81	22,558 25	35,356 06
50	Marshall	13,018 38	20,786 69	33,805 07
51	Martin	3,257 78	5,398 41	8,656 19
52	Miami	18,496 43	23,988 93	42,485 36

SPECIAL SCHOOL REVENUE, YEAR ENDING JULY 31, 1902—Continued.

Number.	COUNTIES.	December Settlement, 1901.	May Settlement, 1902.	Total.
53	Monroe	$6,754 50	$12,433 68	$19,188 18
54	Montgomery	22,982 85	26,950 99	49,933 84
55	Morgan	10,704 96	14,495 90	25,200 86
56	Newton	6,355 96	8,968 68	15,324 64
57	Noble	8,561 50	15,342 19	23,903 69
58	Ohio	1,665 20	2,427 53	4,092 73
59	Orange	3,614 63	5,446 22	9,060 85
60	Owen	6,141 68	8,026 23	14,167 91
61	Parke	12,151 31	17,111 41	29,262 72
62	Perry	3,767 75	7,061 91	10,829 66
63	Pike	4,951 58	6,638 74	11,590 32
64	Porter	14,414 58	23,654 79	38,069 37
65	Posey	8,240 39	15,866 40	24,106 79
66	Pulaski	8,605 38	10,801 66	19,407 04
67	Putnam	9,874 68	13,604 12	23,478 80
68	Randolph	14,535 30	24,522 99	39,058 29
69	Ripley	4,738 95	7,999 93	12,438 88
70	Rush	9,335 17	14,197 61	23,532 78
71	Scott	1,866 80	2,973 50	4,840 30
72	Shelby	12,940 57	18,741 83	31,682 40
73	Spencer	7,169 19	10,987 92	18,157 11
74	Starke	6,043 75	9,194 55	15,238 30
75	St. Joseph	36,344 19	65,697 39	102,041 58
76	Steuben	8,262 28	10,856 10	19,118 38
77	Sullivan	10,323 98	16,653 89	26,977 87
78	Switzerland	3,384 71	4,718 29	8,103 00
79	Tippecanoe	27,519 92	42,794 18	70,314 10
80	Tipton	11,605 48	14,613 95	26,219 43
81	Union	4,077 09	5,903 50	9,980 59
82	Vanderburgh	35,126 06	38,859 04	73,985 10
83	Vermillion	6,950 77	10,095 04	17,045 81
84	Vigo	31,449 20	44,914 54	76,363 74
85	Wabash	14,493 69	18,870 96	33,364 65
86	Warren	6,249 76	8,459 21	14,708 97
87	Warrick	5,068 83	7,539 06	12,607 89
88	Washington	6,727 82	8,578 04	15,305 86
89	Wayne	22,344 15	28,921 17	51,265 32
90	Wells	15,575 15	21,934 28	37,509 43
91	White	9,520 05	17,139 35	26 659 40
92	Whitley	6,648 34	15,359 06	22,007 40
	Total	$1,121,404 60	$1,673,947 72	$2,795,352 32

ENUMERATION, 1902.

Number.	COUNTIES.	White Males.	White Females.	Total.	Colored Males.	Colored Females.	Total.	Grand Total.
1	Adams	3,967	3,770	7,737	. .	. .	. . .	7,737
2	Allen	12,247	11,994	24,241	26	43	69	24,310
3	Bartholomew	3,476	3,339	6,815	55	55	110	6,925
4	Benton	2,015	1,871	3,886	9	14	23	3,909
5	Blackford	2,797	2,594	5,391	4	8	12	5,403
6	Boone	3,944	3,564	7,508	20	13	33	7,541
7	Brown	1,658	1,500	3,158	. .	. .	. . .	3,158
8	Carroll	3,098	2,817	5,915	. .	1	1	5,916
9	Cass	5,240	4,853	10,093	19	23	42	10,135
10	Clark	4,484	4,366	8,850	503	544	1,047	9,897
11	Clay	5,589	5,276	10,865	51	48	99	10,964
12	Clinton	4,389	4,076	8,465	15	18	33	8,498
13	Crawford	2,746	2,343	5,089	. .	. .	. .	5,089
14	Daviess	5,114	4,766	9,880	65	58	123	10,003
15	Dearborn	3,493	3,356	6,849	32	36	68	6,917
16	Decatur	2,784	2,678	5,462	11	10	21	5,483
17	Dekalb	3,949	3,481	7,430	1	3	4	7,434
18	Delaware	7,331	6,731	14,062	110	128	238	14,300
19	Dubois	3,916	3,656	7,572	5	4	9	7,581
20	Elkhart	6,475	6,328	12,803	6	3	9	12,812
21	Fayette	1,854	1,609	3,463	60	70	130	3,593
22	Floyd	4,137	3,985	8,122	327	296	623	8,745
23	Fountain	3,397	3,109	6,506	7	2	9	6,515
24	Franklin	2,467	2,392	4,859	. .	1	1	4,860
25	Fulton	2,856	2,646	5,502	. .	. .	. .	5,502
26	Gibson	4,810	4,504	9,314	270	245	515	9,829
27	Grant	9,184	8,451	17,645	150	130	280	17,925
28	Greene	5,082	4,651	9,733	20	12	32	9,765
29	Hamilton	4,693	4,151	8,844	61	79	140	8,984
30	Hancock	3,105	2,818	5,923	17	9	26	5,949
31	Harrison	3,684	3,386	7,070	48	52	100	7,170
32	Hendricks	3,120	2,891	6,011	42	40	82	6,093
33	Henry	3,510	3,229	6,739	59	68	127	6,866
34	Howard	4,379	4,145	8,524	76	91	167	8,691
35	Huntington	4,592	4,177	8,769	2	. .	2	8,771
36	Jackson	4,184	3,891	8,075	29	20	49	8,124
37	Jasper	2 494	2,212	4,706	. . .	1	1	4,707
38	Jay	4,275	3,821	8,095	25	29	54	8,150
39	Jefferson	3,400	3,285	6,685	160	149	309	6,994
40	Jennings	2,357	2,189	4,546	26	47	73	4,619
41	Johnson	2,946	2,724	5,670	64	76	140	5,810
42	Knox	5,658	5,377	11,035	75	84	159	11,194
43	Kosciusko	4,494	4,207	8,701	4	. . .	4	8,705
44	Lagrange	2,455	2,190	4,645	1	. . .	1	4,646
45	Lake	6,542	6,326	12,868	. . .	7	7	12,875
46	Laporte	6,356	6,113	12,469	11	12	23	12,492
47	Lawrence	4,101	3,684	7,785	46	33	79	7,864
48	Madison	11,297	10,246	21,543	144	122	266	21,809
49	Marion	22,672	22,155	44,824	1,944	2,018	3,962	48,786
50	Marshall	4,043	3,827	7,870	2	3	5	7,875
51	Martin	2,625	2,411	5,036	. . .	1	1	5,037
52	Miami	4,668	4,338	9,006	13	16	29	9,035

ENUMERATION, 1902—Continued.

Number.	COUNTIES.	White Males.	White Females.	Total.	Colored Males.	Colored Females.	Total.	Grand Total.
53	Monroe	3,319	3,094	6,413	64	52	116	6,529
54	Montgomery	4,319	3,818	8,237	48	49	97	8,334
55	Morgan	3,219	2,904	6,123	14	13	27	6,150
56	Newton	1,621	1,553	3,174	8	6	14	3,188
57	Noble	3,371	3,128	6,499	1	2	3	6,502
58	Ohio	684	649	1,333	20	21	41	1,374
59	Orange	2,874	2,526	5,400	10	16	26	5,426
60	Owen	2,449	2,189	4,638	21	14	35	4,673
61	Parke	3,485	3,129	6,614	41	53	94	6,708
62	Perry	3,559	3,273	6,832	37	31	68	6,900
63	Pike	3,569	3,364	6,933	38	23	61	6,994
64	Porter	2,959	2,734	5,693	. .	. .	. .	5,693
65	Posey	3,400	3,072	6,472	187	193	380	6,852
66	Pulaski	2,513	2,416	4,929	. .	. .	. .	4,929
67	Putnam	3,063	2,866	5,929	40	38	78	6,007
68	Randolph	4,371	4,053	8,424	73	58	131	8,555
69	Ripley	3,146	2,945	6,091	8	4	12	6,103
70	Rush	2,660	2,400	5,060	93	78	171	5,231
71	Scott	1,448	1,279	2,727	. .	. .	. .	2,727
72	Shelby	3,879	3,540	7,419	66	66	132	7,551
73	Spencer	3,601	3,309	6,910	213	235	448	7,358
74	Starke	1,877	1,706	3,583	. .	1	1	3,584
75	St. Joseph	9,346	8,571	17,917	93	58	151	18,068
76	Steuben	2,074	1,962	4,036	2	. .	2	4,038
77	Sullivan	4,331	3,999	8,330	35	21	56	8,386
78	Switzerland	1,638	1,571	3,209	17	16	33	3,242
79	Tippecanoe	6,107	5,682	11,789	66	81	147	11,936
80	Tipton	3,046	2,752	5,798	.	. .	.	5,798
81	Union	798	780	1,578	28	26	48	1,626
82	Vanderburgh	6,409	9,811	19,220	890	1,012	1,902	21,122
83	Vermillion	2,376	2,207	4,583	9	21	30	4,613
84	Vigo	9,694	9,418	19,112	333	363	696	19,808
85	Wabash	4,463	4,300	8,763	20	16	36	8,799
86	Warren	1,634	1,502	3,136	1		1	3,137
87	Warrick	3,608	3,338	6,946	133	102	235	7,181
88	Washington	3,171	3,012	6,183	. .	.	. .	6,183
89	Wayne	4,998	4,764	9,762	184	197	381	10,143
90	Wells	3,749	3,509	7,258	. . .	.	. .	7,258
91	White	3,019	2,726	5,745	1	3	4	5,749
92	Whitley	2,732	2,614	5,346	6	2	8	5,354
	Total	385,738	361,061	746,799	7,415	7,587	15,002	761,801

ENROLLMENT AND ATTENDANCE, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	White males.	Colored males.	White females.	Colored females.	Total.	Daily Attendance.
1	Adams	2,870		2,578		5,448	4,555
2	Allen	6,272	20	5,915	27	12,234	9,035
3	Bartholomew	2,636	40	2,542	59	5,277	4,157
4	Benton	1,648	8	1,622	11	3,289	2,573
5	Blackford	2,243	4	2,182	5	4,434	3,157
6	Boone	3,456	19	3,155	12	6 642	5,293
7	Brown	1,391		1,270		2,661	1,931
8	Carroll	2,511	1	2,380	2	4,894	4,049
9	Cass	3,675	7	3,482	9	7,173	5,595
10	Clark	3,256	311	3,053	345	6,965	5,789
11	Clay	4,072	26	4,004	24	8,126	6,148
12	Clinton	3,567	15	3,430	12	7,024	5,437
13	Crawford	2,016		1,720		3,736	2,666
14	Daviess	3,711	48	3,550	51	7,360	5,587
15	Dearborn	2,150	10	2,204	10	4,374	3,188
16	Decatur	2,065	6	2,064	6	4,141	3,176
17	Dekalb	3,044	1	2,803	3	5,851	4,740
18	Delaware	5,265	73	5,610	93	11,041	8,000
19	Dubois	2,391	2	2,251	2	4,646	3,546
20	Elkhart	4,722	2	4,899	2	9,625	8,245
21	Fayette	1,242	41	1,181	44	2,508	1,920
22	Floyd	2,483	193	2,429	202	5,307	3,871
23	Fountain	2,695	2	2,526	3	5,226	4,175
24	Franklin	1,546		1,555		3,101	2,339
25	Fulton	2,316		2,232	1	4,549	3,608
26	Gibson	3,784	221	3,421	231	7,657	5,666
27	Grant	6,391	157	6,338	127	13,013	10,100
28	Greene	4,275	19	4,004	10	8,308	6,340
29	Hamilton	3,887	36	3,540	47	7,510	6,036
30	Hancock	2,395	7	2,281	5	4,688	3,676
31	Harrison	2,798	60	2,566	69	5,493	3,925
32	Hendricks	2,295	17	2,298	27	4,637	3,628
33	Henry	2,828	40	2,673	45	5,586	4,561
34	Howard	3,541	55	3,274	63	6,933	5,467
35	Huntington	3,423	2	3,286		6,711	5,619
36	Jackson	3,008	18	2,960	10	5,996	4,483
37	Jasper	2,077		1,970		4,047	2,834
38	Jay	3,512	15	3,249	18	6,794	5,157
39	Jefferson	2,291	111	2,134	104	4,640	3,743
40	Jennings	1,741	29	1,758	31	3,559	2,771
41	Johnson	2,260	56	2,268	67	4,651	3,594
42	Knox	3,552	56	3,724	66	7,398	6,068
43	Kosciusko	3,528	2	3,432		6,962	5,669
44	Lagrange	1,973		1,876		3,849	2,978
45	Lake	3,749		3,886	6	7,641	5,433
46	Laporte	3,377	4	3,359	8	6,748	5,091
47	Lawrence	3,197	22	3,258	21	6,498	4,663
48	Madison	7,853	114	7,810	113	15,890	12,167
49	Marion	15,242	1,226	15,331	1,383	33,182	26,370
50	Marshall	3,278	3	3,136	6	6,423	5,112
51	Martin	1,929	1	1,832	1	3,763	2,854
52	Miami	3,512	4	3,394	2	6,912	5,264

ENROLLMENT AND ATTENDANCE, YEAR ENDING JULY 31, 1902—Con.

Number.	COUNTIES.	White Males.	Colored Males.	White Females.	Colored Females.	Total.	Daily Attendance.
53	Monroe	2,781	46	2,703	45	5,575	4,591
54	Montgomery	3,428	34	3,214	42	6,718	5,035
55	Morgan	2,551	6	2,461	8	5,026	3,997
56	Newton	1,364	1	1,323	..	2,688	2,006
57	Noble	2,494	1	2,422	2	4,919	3,913
58	Ohio	514	14	539	19	1,086	807
59	Orange	2,172	4	2,099	3	4,278	3,413
60	Owen	2,071	10	1,805	9	3,895	2,943
61	Parke	2,795	20	2,799	34	5,648	4,187
62	Perry	2,202	27	2,137	34	4,400	3,315
63	Pike	2,953	11	2,875	4	5,843	4,220
64	Porter	2,096	....	1,989	....	4,085	3,243
65	Posey	2,669	131	2,519	172	5,491	4,371
66	Pulaski	1,865	..	1,870	...	3,735	2,977
67	Putnam	2,490	25	2,506	23	5,044	3,728
68	Randolph	3,410	70	3,287	52	6,819	5,338
69	Ripley	2,121	6	2,002	3	4,132	3,129
70	Rush	2,105	58	1,905	61	4,129	3,211
71	Scott	1,130	..	1,006	....	2,136	1,551
72	Shelby	3,092	57	2,950	62	6,161	4,688
73	Spencer	2,774	152	2,645	168	5,739	4,023
74	Starke	1,485	..	1,470	1	2,956	2,399
75	St. Joseph	4,817	50	4,694	50	9,611	7,093
76	Steuben	1,730	2	1,673	....	3,405	2,804
77	Sullivan	3,474	22	3,432	12	6,940	5,234
78	Switzerland	1,262	13	1,316	13	2,604	2,055
79	Tippecanoe	4,067	56	4,083	56	8,262	6,176
80	Tipton	2,517	....	2,263	....	4,780	3,570
81	Union	650	11	668	10	1,339	974
82	Vanderburgh	4,988	559	5,097	598	11,242	8,734
83	Vermillion	1,981	3	2,002	9	3,995	2,981
84	Vigo	6,424	258	6,668	269	13,619	10,192
85	Wabash	3,556	8	3,476	7	7,047	5,420
86	Warren	1,434	..	1,397	...	2,831	2,177
87	Warrick	2,842	101	2,600	75	5,618	4,291
88	Washington	2,673	....	2,640	...	5,313	4,060
89	Wayne	3,350	139	3,219	160	6,868	5,478
90	Wells	2,986	...	2,819	..	5,805	4,462
91	White	2,591	1	2,395	3	4,990	4,665
92	Whitley	2,199	5	2,124	3	4,331	3,508
	Total	279,042	5,005	270,787	5,390	560,224	423,078

NUMBER SCHOOLHOUSES, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	Stone.	Brick.	Frame.	Log.	Total.
1	Adams		76	19		95
2	Allen		173	20		193
3	Bartholomew		82	25		107
4	Benton		11	84		95
5	Blackford		49	5		54
6	Boone		113	21		134
7	Brown		76			76
8	Carroll		86	25		111
9	Cass	1	68	52		121
10	Clark		16	88	1	105
11	Clay		53	65		118
12	Clinton	1	103	15		119
13	Crawford		1	83		84
14	Daviess		43	88		131
15	Dearborn	10	56	34		100
16	Decatur		84	8		92
17	Dekalb		98	11		109
18	Delaware		131	12		143
19	Dubois		6	98	1	105
20	Elkhart	1	134	16		151
21	Fayette		4	44		48
22	Floyd		13	43		56
23	Fountain		14	80		94
24	Franklin	16	46	32		94
25	Fulton		40	70		110
26	Gibson		12	113		125
27	Grant		120	23		143
28	Greene		22	130		152
29	Hamilton		69	33		102
30	Hancock	2	65	15		82
31	Harrison		149			149
32	Hendricks		80	13		93
33	Henry		41	54		95
34	Howard		80	12		92
35	Huntington		110	3		113
36	Jackson		19	97		116
37	Jasper		5	112		117
38	Jay		99	18		117
39	Jefferson	34	19	61		114
40	Jennings		40	46	1	87
41	Johnson		85	8		93
42	Knox		36	88		124
43	Kosciusko		133	21		154
44	Lagrange		56	45		101
45	Lake	1	34	91		126
46	Laporte	1	54	78		133
47	Lawrence	1	5	104		110
48	Madison		153	10		163
49	Marion		116	45		161
50	Marshall		10	89		129
51	Martin		2	96		98
52	Miami		94	30		124

NUMBER SCHOOLHOUSES, YEAR ENDING JULY 31, 1902—Continued.

Number.	COUNTIES.	Stone.	Brick.	Frame.	Log.	Total.
53	Monroe		15	90		105
54	Montgomery	2	35	108		145
55	Morgan		79	26		105
56	Newton		3	72		75
57	Noble		111	5		116
58	Ohio		1	26		27
59	Orange		2	98		100
60	Owen		3	94		97
61	Parke		12	115		127
62	Perry		6	101		107
63	Pike		5	100		105
64	Porter		55	47		102
65	Posey		29	63		92
66	Pulaski		7	84		91
67	Putnam		30	102		132
68	Randolph		69	68		137
69	Ripley	10	65	36		111
70	Rush		64	24		88
71	Scott		23	28		51
72	Shelby		120	12		132
73	Spencer		40	81		121
74	Starke		9	61		70
75	St. Joseph		76	53		129
76	Steuben		80	16		96
77	Sullivan		79	48		127
78	Switzerland	15	21	45		81
79	Tippecanoe	1	75	68		144
80	Tipton		75	6		81
81	Union		26	12		38
82	Vanderburgh		64	30		94
83	Vermillion		29	45		74
84	Vigo		37	95		132
85	Wabash	1	118	15		134
86	Warren		7	90		97
87	Warrick		8	111		119
88	Washington		2	135		137
89	Wayne		80	11		91
90	Wells		106			106
91	White		10	106		116
92	Whitley		90	7		97
	Total	97	5,080	4,807	3	9,987

NUMBER TEACHERS EMPLOYED, 1901–1902.

Number.	COUNTIES.	Males.	Females.	Total.
1	Adams	80	55	135
2	Allen	103	252	355
3	Bartholomew	81	85	166
4	Benton	40	85	125
5	Blackford	52	45	97
6	Boone	89	91	180
7	Brown	60	16	76
8	Carroll	85	75	160
9	Cass	73	125	198
10	Clark	83	103	186
11	Clay	92	93	185
12	Clinton	103	87	190
13	Crawford	75	21	96
14	Daviess	111	74	185
15	Dearborn	64	82	146
16	Decatur	54	90	144
17	Dekalb	85	73	158
18	Delaware	119	166	285
19	Dubois	71	77	148
20	Elkhart	112	167	279
21	Fayette	34	44	78
22	Floyd	45	78	123
23	Fountain	76	90	166
24	Franklin	48	58	106
25	Fulton	73	65	138
26	Gibson	111	96	207
27	Grant	121	166	287
28	Greene	96	103	199
29	Hamilton	111	96	207
30	Hancock	91	57	148
31	Harrison	117	49	166
32	Hendricks	63	84	147
33	Henry	86	82	168
34	Howard	89	84	173
35	Huntington	91	95	186
36	Jackson	74	96	170
37	Jasper	49	91	140
38	Jay	102	70	172
39	Jefferson	46	115	161
40	Jennings	52	63	115
41	Johnson	66	80	146
42	Knox	95	112	207
43	Kosciusko	99	103	202
44	Lagrange	67	61	128
45	Lake	46	203	249
46	Laporte	47	144	191
47	Lawrence	72	89	161
48	Madison	242	228	370
49	Marion	141	725	866
50	Marshall	98	90	188
51	Martin	68	32	100
52	Miami	113	100	213

NUMBER TEACHERS EMPLOYED, 1901-1902—Continued.

Number.	COUNTIES.	Males.	Females.	Total.
53	Monroe	72	76	148
54	Montgomery	106	107	213
55	Morgan	69	87	156
56	Newton	40	62	102
57	Noble	65	86	151
58	Ohio	22	15	37
59	Orange	66	48	114
60	Owen	64	56	120
61	Parke	76	95	171
62	Perry	73	56	129
63	Pike	108	30	138
64	Porter	42	102	144
65	Posey	75	73	148
66	Pulaski	58	68	126
67	Putnam	74	102	176
68	Randolph	95	105	200
69	Ripley	69	64	133
70	Rush	64	73	137
71	Scott	40	23	63
72	Shelby	111	90	201
73	Spencer	77	98	175
74	Starke	37	48	85
75	St. Joseph	76	208	284
76	Steuben	33	85	118
77	Sullivan	78	91	169
78	Switzerland	46	50	96
79	Tippecanoe	77	182	259
80	Tipton	81	38	119
81	Union	22	36	58
82	Vanderburgh	58	268	326
83	Vermillion	54	52	106
84	Vigo	77	269	346
85	Wabash	81	151	232
86	Warren	45	69	114
87	Warrick	109	49	158
88	Washington	122	38	160
89	Wayne	63	157	220
90	Wells	95	54	149
91	White	74	88	162
92	Whitley	56	73	129
	Total	7,006	9,033	16,039

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN TOWNSHIPS, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	Number of Teachers in Townships.			Aggregate Amount Paid Teachers Per Day in Townships.			Average Amount Paid Per Day in Townships.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Township.
1	Adams	68	31	99	$153 70	$69 78	$223 48	$2 28	$2 26	$2 26
2	Allen	87	95	182	198 27	205 57	403 84	2 28	2 16	2 21
3	Bartholomew	63	47	110	146 19	113 70	259 89	2 32	2 20	2 36
4	Benton	30	61	91	78 81	134 98	213 79	2 63	2 21	2 35
5	Blackford	39	8	47	95 31	19 67	114 98	2 44	2 46	2 45
6	Boone	78	57	135	180 90	126 45	307 36	2 32	2 21	2 28
7	Brown	58	15	73	131 00	33 45	164 45	2 25	2 16	2 25
8	Carroll	76	62	138	188 15	140 05	328 20	2 48	2 26	2 37
9	Cass	59	63	122	145 61	135 27	280 88	2 48	2 14	2 22
10	Clark	65	49	114	156 08	110 87	266 95	2 39	2 26	2 34
11	Clay	73	58	131	168 98	126 15	295 13	2 34	2 18	2 25
12	Clinton	86	44	130	212 23	97 64	309 87	2 47	2 22	2 38
13	Crawford	64	18	82	142 92	39 19	182 11	2 23	2 18	2 22
14	Daviess	86	47	133	198 05	108 55	306 60	2 31	2 25	2 30
15	Dearborn	50	40	90	111 50	90 24	201 74	2 23	2 26	2 24
16	Decatur	45	63	108	113 62	144 33	257 95	2 53	2 29	2 39
17	Dekalb	68	33	101	153 64	72 33	225 97	2 26	2 19	2 24
18	Delaware	98	67	165	245 11	156 30	401 41	2 50	2 33	2 38
19	Dubois	61	60	121	133 25	129 72	262 97	2 18	2 16	2 17
20	Elkhart	88	54	142	226 59	132 18	358 77	2 57	2 45	2 53
21	Fayette	26	23	49	67 87	51 81	119 68	2 61	2 25	2 44
22	Floyd	28	17	45	57 20	35 25	92 45	2 04	2 07	2 05
23	Fountain	66	57	123	162 98	130 35	293 33	2 47	2 28	2 38
24	Franklin	42	48	90	100 45	111 21	211 66	2 39	2 32	2 35
25	Fulton	64	50	114	143 09	113 18	256 27	2 24	2 26	2 25
26	Gibson	99	64	163	243 01	145 50	388 51	2 45	2 22	2 38
27	Grant	86	45	131	221 31	113 81	335 12	2 58	2 53	2 55
28	Greene	88	74	162	196 45	158 82	355 27	2 23	2 15	2 19

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN TOWNSHIPS—Continued.

Number.	COUNTIES.	Number of Teachers in Townships.			Aggregate Amount Paid Teachers Per Day in Townships.			Average Amount Paid Per Day in Townships.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Township.
29	Hamilton	94	61	155	3233 50	$137 72	$371 22	$2 48	$2 23	$2 39
30	Hancock	79	36	115	193 17	82 30	275 47	2 45	2 17	2 39
31	Harrison	103	40	143	235 50	88 48	323 98	2 28	2 21	2 27
32	Hendricks	60	72	132	158 43	169 10	327 53	2 64	2 35	2 48
33	Henry	67	52	119	169 20	127 36	296 56	2 57	2 31	2 49
34	Howard	73	33	106	174 02	75 47	249 49	2 38	2 28	2 35
35	Huntington	72	37	109	192 24	84 75	276 99	2 67	2 29	2 54
36	Jackson	68	55	123	160 25	118 78	279 03	2 35	2 16	2 27
37	Jasper	40	72	112	89 53	155 24	244 77	2 24	2 15	2 18
38	Jay	85	34	119	196 85	75 39	272 24	2 32	2 22	2 28
39	Jefferson	41	70	111	80 78	138 86	219 64	1 97	1 98	1 98
40	Jennings	47	50	97	109 65	113 22	222 87	2 33	2 26	2 29
41	Johnson	57	45	102	141 11	102 35	243 46	2 48	2 27	2 39
42	Knox	80	80	160	196 62	174 43	371 05	2 46	2 18	2 32
43	Kosciusko	79	71	150	183 69	158 04	341 73	2 32	2 24	2 28
44	Lagrange	61	48	109	146 28	106 64	252 92	2 38	2 22	2 32
45	Lake	32	95	127	81 64	208 85	290 49	2 55	2 20	2 29
46	Laporte	35	81	116	90 14	206 81	296 95	2 57	2 55	2 56
47	Lawrence	63	58	121	147 27	124 97	272 24	2 36	2 15	2 25
48	Madison	96	56	152	276 56	140 22	416 78	2 88	2 50	2 74
49	Marion	60	97	157	190 00	236 31	426 31	3 16	2 43	2 65
50	Marshall	78	64	142	174 84	140 97	315 81	2 24	2 20	2 22
51	Martin	67	31	98	148 50	64 58	213 08	2 22	2 08	2 17
52	Miami	92	52	144	220 51	116 01	336 52	2 40	2 23	2 34
53	Monroe	63	43	106	140 54	93 18	233 72	2 23	2 17	2 20
54	Montgomery	92	62	154	217 65	141 64	359 29	2 37	2 23	2 31
55	Morgan	62	63	125	149 04	139 19	288 23	2 40	2 21	2 31
56	Newton	31	44	75	71 05	98 52	169 57	2 29	2 24	2 26

57	Noble	53	58	111	122 63	127 84	250 47	2 31	2 20	2 25
58	Ohio	18	7	25	37 25	14 49	51 74	2 07	2 07	2 07
59	Orange	59	35	94	138 75	74 85	213 60	2 35	2 14	2 26
60	Owen	57	47	104	132 67	106 33	239 00	2 33	2 26	2 30
61	Parke	70	72	142	169 67	163 09	332 76	2 42	2 27	2 34
62	Perry	64	42	106	147 04	94 89	241 93	2 30	2 26	2 28
63	Pike	96	22	118	214 02	43 13	257 15	2 23	1 96	2 17
64	Porter	38	75	113	96 45	167 93	264 38	2 35	2 20	2 33
65	Posey	62	47	109	154 81	106 26	261 07	2 49	2 26	2 40
66	Pulaski	51	59	110	111 17	123 91	235 08	2 18	2 10	2 14
67	Putnam	66	74	140	150 69	163 32	314 01	2 28	2 21	2 24
68	Randolph	82	65	147	199 83	150 48	350 31	2 41	2 30	2 38
69	Ripley	57	54	111	128 61	117 76	246 37	2 26	2 06	2 22
70	Rush	58	49	107	155 47	112 10	267 57	2 66	2 31	2 50
71	Scott	37	18	55	84 57	39 17	123 74	2 28	2 18	2 25
72	Shelby	101	55	156	231 75	126 73	358 48	2 42	2 26	2 30
73	Spencer	63	71	134	152 57	151 07	303 64	2 42	2 12	2 26
74	Starke	32	39	71	70 69	84 14	154 83	2 20	2 15	2 18
75	St. Joseph	57	59	116	125 13	134 69	259 82	2 20	2 28	2 24
76	Steuben	27	71	98	67 30	158 08	225 38	2 49	2 23	2 30
77	Sullivan	68	69	137	159 54	151 83	311 37	2 34	2 20	2 27
78	Switzerland	41	37	78	68 50	64 57	133 07	1 67	1 75	1 71
79	Tippecanoe	59	101	160	152 08	225 94	378 02	2 58	2 23	2 36
80	Tipton	74	21	95	173 24	47 72	220 96	2 33	2 27	2 32
81	Union	17	26	43	43 46	61 74	105 20	2 57	2 38	2 45
82	Vanderburgh	30	56	86	69 03	131 26	200 29	2 30	2 34	2 33
83	Vermillion	43	37	80	116 19	81 20	197 39	2 70	2 19	2 47
84	Vigo	45	102	147	115 13	258 57	373 70	2 55	2 45	2 51
85	Wabash	74	82	156	179 88	187 31	367 19	2 43	2 28	2 33
86	Warren	39	59	98	82 24	148 86	231 10	2 11	2 52	2 36
87	Warrick	96	37	133	221 05	82 51	303 56	2 30	2 23	2 28
88	Washington	106	25	131	239 29	55 03	294 32	2 26	2 20	2 25
89	Wayne	43	55	98	112 74	130 94	243 68	2 62	2 38	2 49
90	Wells	88	36	124	206 69	83 29	289 98	2 35	2 32	2 33
91	White	60	56	116	146 50	123 10	269 60	2 43	2 20	2 32
92	Whitley	48	52	100	109 86	116 71	226 57	2 27	2 23	2 27
	Total	5,797	4,822	10,619	$13,827 33	$10,876 57	$24,703 90	$2 38	$2 26	$2 33

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN TOWNS, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	Number of Teachers in Towns.			Aggregate Amount Paid Teachers Per Day in Towns.			Average Amount Paid Per Day in Towns.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Towns.
1	Adams	4	9	13	$12 43	$20 66	$33 09	$3 11	$2 29	$2 55
2	Allen	6	5	11	15 70	11 17	26 87	2 62	2 23	2 44
3	Bartholomew	5	8	13	13 65	17 63	31 28	2 72	2 20	2 41
4	Benton	10	24	34	34 25	57 83	92 08	3 43	2 41	2 70
5	Blackford (No towns)									
6	Boone	7	11	18	25 63	24 67	56 30	3 66	2 24	2 79
7	Brown	2	1	3	7 80	2 30	7 10	2 40	2 30	2 37
8	Carroll	4	5	9	10 95	11 90	22 85	2 73	2 38	2 54
9	Cass	4	5	9	10 98	11 23	22 21	2 74	2 24	2 47
10	Clark	9	15	24	27 98	33 68	61 66	3 12	2 26	2 57
11	Clay	13	14	27	35 72	30 52	66 24	2 75	2 18	2 45
12	Clinton	10	9	19	29 43	21 03	50 46	2 94	2 34	2 66
13	Crawford	11	3	14	29 48	5 30	34 78	2 68	1 77	2 48
14	Daviess	11	5	16	27 82	12 19	40 01	2 68	2 28	2 50
15	Dearborn	5	11	16	15 06	25 13	40 19	3 01	2 28	2 51
16	Decatur	4	5	9	10 43	10 90	21 33	2 61	2 18	2 37
17	Dekalb	9	18	27	29 36	41 58	70 94	3 26	2 31	2 63
18	Delaware	7	14	21	21 02	29 97	50 99	3 00	2 30	2 43
19	Dubois	5	8	13	14 27	17 97	32 24	2 85	2 25	2 48
20	Elkhart	9	13	22	29 71	30 91	60 62	3 30	2 38	3 76
21	Fayette	1	2	3	2 50	5 00	7 50	2 50	2 50	2 50
22	Floyd	3	1	4	6 50	1 90	8 40	2 16	1 90	2 10
23	Fountain (No towns)									
24	Franklin	6	10	16	20 20	23 16	43 36	3 37	2 31	2 71
25	Fulton	9	15	24	33 72	37 01	70 73	3 75	2 47	2 95
26	Gibson	4	7	11	12 88	12 00	24 88	3 47	2 00	2 26
27	Grant	17	32	49	37 82	72 83	110 65	2 22	2 27	2 26
28	Greene	6	16	22	26 15	36 48	62 63	4 36	2 28	2 83

29	Hamilton	9	12	21	27 29	27 85	55 14	3 28	2 30	2 63
30	Hancock	5	3	8	14 52	6 78	21 30	2 90	2 26	2 66
31	Harrison	14	9	23	35 20	21 18	56 38	2 51	2 35	2 45
32	Hendricks	3	12	15	12 30	28 30	40 60	4 10	2 36	2 71
33	Henry	19	30	49	60 18	79 80	139 98	3 24	2 51	2 85
34	Howard	4	5	9	12 20	10 50	22 70	3 05	2 10	2 52
35	Huntington	10	18	28	29 14	41 38	70 52	2 91	2 30	2 52
36	Jackson	3	15	18	10 15	32 65	42 80	3 38	2 18	2 33
37	Jasper	5	7	12	14 25	16 38	30 63	2 85	2 34	2 55
38	Jay	3	8	11	9 40	17 98	27 38	3 13	2 17	2 49
39	Jefferson	1	7	8	2 16	14 82	16 98	2 16	2 12	2 12
40	Jennings	1	4	5	3 50	9 44	12 94	3 50	2 36	2 60
41	Johnson	3	16	19	14 25	36 20	50 45	5 31	2 35	2 66
42	Knox	4	2	6	9 95	4 25	14 20	2 49	2 13	2 37
43	Kosciusko	14	18	32	38 43	39 39	77 82	2 75	2 19	2 43
44	Lagrange	6	13	19	19 50	31 94	51 44	3 25	2 46	2 71
45	Lake	8	33	41	32 80	85 35	118 15	4 10	2 56	2 88
46	Laporte	1	3	4	3 25	6 50	9 75	3 25	2 17	2 44
47	Lawrence	4	6	10	12 03	13 50	25 53	3 00	2 25	2 55
48	Madison	16	26	42	50 59	62 30	112 89	3 16	2 40	2 69
49	Marion (No towns)									
50	Marshall	15	13	28	43 29	30 36	73 65	2 88	2 34	2 63
51	Martin	5	9	14	15 14	20 67	35 81	3 03	2 30	2 56
52	Miami	9	9	18	26 97	20 95	47 92	3 00	2 33	2 66
53	Monroe	2	2	4	9 25	4 65	13 90	4 62	2 33	3 48
54	Montgomery	8	18	26	24 95	46 12	71 07	3 30	2 45	2 73
55	Morgan	2	6	8	6 50	14 20	20 70	3 75	2 36	2 59
56	Newton	9	18	27	31 94	44 67	76 61	3 22	2 50	2 84
57	Noble	4	8	12	12 28	18 21	30 49	3 07	2 22	2 54
58	Ohio (No towns)									
59	Orange	7	13	20	21 96	30 23	52 19	3 14	2 33	2 61
60	Owen	7	9	16	20 28	20 25	40 53	2 90	2 25	2 53
61	Parke	6	23	29	21 92	52 93	74 85	3 65	2 30	2 58
62	Perry	2	1	3	5 62	2 39	8 01	2 81	2 39	2 67
63	Pike	7	8	15	21 60	18 32	39 92	3 09	2 29	2 66
64	Porter (No towns)									
65	Posey	5	8	13	16 83	19 35	36 18	3 37	2 42	2 78
66	Pulaski	7	9	16	22 60	20 63	43 23	3 23	2 29	2 70
67	Putnam	6	10	16	15 97	22 03	38 00	2 66	2 20	2 37
68	Randolph	6	11	17	18 02	24 70	42 72	3 01	2 22	2 51

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN TOWNS—Continued.

Number.	COUNTIES.	Number of Teachers in Towns.			Aggregate Amount Paid Teachers Per Day in Towns.			Average Amount Paid Per Day in Towns.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Towns.
69	Ripley	12	10	22	$33 58	$23 12	$56 70	$2 80	$2 31	$2 58
70	Rush	3	5	8	10 00	9 37	19 37	3 33	1 87	2 42
71	Scott	3	5	8	8 00	9 80	17 80	2 67	1 96	2 23
72	Shelby	2	3	5	6 16	6 97	13 13	3 08	2 32	2 63
73	Spencer	14	27	41	41 48	59 64	101 12	2 96	2 21	2 47
74	Starke	5	9	14	16 95	26 18	43 13	3 39	2 91	3 07
75	St. Joseph	9	8	17	25 39	18 96	44 35	2 82	2 37	2 61
76	Steuben	6	14	20	19 29	31 20	50 49	3 03	2 13	2 52
77	Sullivan	10	22	32	35 35	57 19	92 54	3 54	2 59	2 88
78	Switzerland	4	2	6	9 22	4 00	13 22	2 31	2 00	2 20
79	Tippecanoe	5	13	18	43 80	24 90	68 70	8 76	2 56	3 83
80	Tipton	2	5	7	6 75	10 85	17 60	3 37	2 17	2 52
81	Union	1	5	6	3 75	11 50	15 25	3 75	2 30	2 54
82	Vanderburgh (No towns)	...	...	...	...	...	...	...	...	...
83	Vermillion	7	4	11	27 00	8 84	35 84	3 87	2 21	3 26
84	Vigo	2	2	4	4 85	4 34	9 19	...	...	2 30
85	Wabash	6	17	23	21 44	35 39	56 83	3 57	2 26	2 47
86	Warren	6	10	16	19 79	24 54	44 33	3 30	2 45	2 77
87	Warrick	13	12	25	33 12	26 13	59 25	2 54	2 19	2 37
88	Washington	16	13	29	44 68	27 55	72 23	2 91	2 12	2 51
89	Wayne	11	24	35	37 75	62 10	99 85	3 43	2 58	2 85
90	Wells (No towns)	...	...	...	...	...	...	...	...	...
91	White	14	32	46	46 75	75 24	121 99	3 34	3 35	2 65
92	Whitley	5	8	13	24 91	15 04	39 95	4 96	1 88	2 07
	Total	577	938	1,515	$1,804 66	$2,174 95	$3,979 61	$3 13	$2 32	$2 63

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN CITIES, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	Number of Teachers in Cities.			Aggregate Amount Paid Teachers Per Day in Cities.			Average Amount Paid Per Day in Cities.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Cities.
1	Adams	8	15	23	$20 47	$36 24	$56 71	$2 56	$2 41	$2 47
2	Allen	10	152	162	71 28	395 44	466 72	6 48	2 60	2 88
3	Bartholomew	13	30	43	49 49	81 79	131 28	3 81	2 73	3 05
4	Benton (No cities)									
5	Blackford	13	37	50	46 13	82 07	128 20	3 55	2 22	2 56
6	Boone	4	23	27	19 30	54 56	73 86	3 86	2 37	2 73
7	Brown (No cities)									
8	Carroll	5	8	13	19 22	19 50	38 72	3 84	2 90	2 98
9	Cass	10	57	67	48 28	145 82	194 10	4 82	2 50	2 90
10	Clark	9	39	48	42 42	104 50	146 92	4 71	2 68	3 06
11	Clay	6	21	27	27 97	50 72	78 69	3 99	2 30	2 91
12	Clinton	7	34	41	40 18	86 58	126 76	5 02	2 54	3 09
13	Crawford (No cities)									
14	Daviess	14	22	36	51 46	53 31	104 77	3 60	2 42	2 91
15	Dearborn	9	31	40	33 14	78 17	111 31	3 68	2 52	2 78
16	Decatur	5	22	27	23 83	53 35	77 18	4 77	2 43	2 86
17	Dekalb	8	22	30	29 50	71 65	101 15	4 20	2 34	3 37
18	Delaware	14	85	99	63 81	225 30	289 11	4 55	2 65	2 92
19	Dubois	5	9	14	12 46	18 07	30 53	2 49	2 01	2 18
20	Elkhart	15	100	115	76 61	287 58	364 19	5 11	2 88	3 17
21	Fayette	7	19	26	22 35	48 45	70 80	3 20	2 52	2 72
22	Floyd	14	60	74	59 75	156 21	215 96	4 27	2 78	2 92
23	Fountain	10	33	43	40 33	76 17	116 50	4 03	2 31	2 71
24	Franklin (No cities)									
25	Fulton (No cities)									
26	Gibson	8	25	33	32 51	62 42	94 93	3 65	2 50	2 88
27	Grant	18	89	107	63 38	259 88	323 26	3 52	2 92	3 01
28	Greene	2	13	15	7 37	31 08	38 45	3 68	2 39	2 56

AGGREGATE AND AVERAGE AMOUNTS PAID TEACHERS PER DAY IN CITIES—Continued.

Number.	COUNTIES.	Number of Teachers in Cities.			Aggregate Amount Paid Teachers Per Day in Cities.			Average Amount Paid Per Day in Cities.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Average Paid All Teachers in Cities.
29	Hamilton	8	23	31	$31 00	$53 60	$84 60	$3 88	$2 55	$2 70
30	Hancock	7	18	25	28 75	44 90	73 65	3 59	2 49	2 95
31	Harrison (No cities)									
32	Hendricks (No cities)									
33	Henry (No cities)									
34	Howard	12	46	58	52 08	109 89	161 97	4 34	2 49	2 79
35	Huntington	9	40	49	38 54	108 87	147 41	4 29	2 72	3 01
36	Jackson	3	26	29	14 77	58 10	72 87	4 92	2 23	2 51
37	Jasper	4	12	16	18 45	31 75	50 20	4 61	2 65	3 14
38	Jay	14	28	42	56 11	65 42	121 53	4 00	2 64	2 89
39	Jefferson	4	38	42	19 62	88 51	108 13	4 91	2 33	2 58
40	Jennings	4	9	13	12 53	20 91	33 44	3 13	2 32	2 57
41	Johnson	6	19	25	18 90	46 50	65 40	3 15	2 46	2 62
42	Knox	11	30	41	44 00	68 52	112 52	4 00	2 28	2 74
43	Kosciusko	6	14	20	23 90	31 30	55 20	3 98	2 24	2 76
44	Lagrange (No cities)									
45	Lake	6	73	79	33 57	174 45	208 02	5 60	2 39	2 63
46	Laporte	11	60	71	37 20	190 73	227 93	3 38	3 18	3 21
47	Lawrence	5	25	30	20 80	59 61	80 41	4 17	2 38	2 68
48	Madison	30	146	176	121 44	384 01	505 45	4 05	2 69	2 93
49	Marion	81	628	709	372 27	1,956 21	2,328 48	4 58	3 11	3 29
50	Marshall	5	13	18	21 00	31 25	52 25	4 20	2 40	2 85
51	Martin (No cities)									
52	Miami	12	39	51	43 10	100 85	143 95	3 60	2 65	2 82
53	Monroe	7	31	38	25 02	66 91	91 93	3 17	2 16	2 42
54	Montgomery	6	27	33	26 76	69 29	96 05	4 46	2 56	2 91
55	Morgan	5	18	23	23 20	42 95	66 15	3 87	2 39	2 88
56	Newton (No cities)									

57	Noble	8	20	28	33 51	55 10	88 61	4 19	2 75	3 15
58	Ohio	4	8	12	16 67	16 37	33 04	4 17	2 05	2 75
59	Orange (No cities)									
60	Owen (No cities)									
61	Parke (No cities)									
62	Perry	7	13	20	27 88	31 68	59 56	3 98	2 43	2 98
63	Pike (No cities)									
64	Porter	4	27	31	17 83	66 30	84 13	4 45	2 40	2 71
65	Posey	8	18	26	29 31	43 96	73 27	3 66	2 45	2 86
66	Pulaski (No cities)									
67	Putnam	2	18	20	11 69	51 14	62 83	5 85	2 84	3 64
68	Randolph	7	29	36	32 45	21 03	103 48	3 01	2 22	2 76
69	Ripley (No cities)									
70	Rush	3	19	22	14 79	52 75	67 54	4 93	2 77	3 07
71	Scott (No cities)									
72	Shelby	8	32	40	37 64	86 60	124 24	4 18	2 70	3 11
73	Spencer (No cities)									
74	Starke (No cities)									
75	St. Joseph	10	141	151	58 94	361 94	420 88	5 89	2 57	2 79
76	Steuben (No cities)									
77	Sullivan (No cities)									
78	Switzerland	1	11	12	6 33	29 63	35 96	6 33	2 69	3 00
79	Tippecanoe	13	68	81	74 73	199 09	273 82	5 75	2 93	3 38
80	Tipton		12	17	19 66	30 19	49 85	3 93	2 52	2 93
81	Union	4	5	9	16 25	12 46	28 71	4 06	2 49	3 19
82	Vanderburgh	28	212	240	116 73	586 08	702 81	4 16	2 76	3 25
83	Vermillion	4	11	15	15 05	25 80	40 85	3 76	2 35	2 72
84	Vigo	30	165	195	139 22	467 59	606 81	4 49	2 83	3 11
85	Wabash	1	52	53	10 27	144 38	154 65	10 27	2 77	2 92
86	Warren (No cities)									
87	Warrick (No cities)									
88	Washington (No cities)									
89	Wayne	9	78	87	53 80	220 40	274 20	5 97	2 85	3 15
90	Wells	7	18	25	26 96	45 50	72 46	3 85	2 52	2 90
91	White (No cities)									
92	Whitley	3	13	16	13 90	30 92	44 82	4 63	2 38	2 80
	Total	636	3,279	3,915	$2,757 86	$8,912 30	$11,670 16	$4 34	$2 72	$2 99

*Superintendent.

TUITION RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, 1901-1902.

Number.	COUNTIES.	Total Revenue for Tuition.	Amount Paid Teachers in Townships.	Amount Paid Teachers in Towns.	Amount Paid Teachers in Cities.	Total Paid Teachers in Counties.	Balance Tuition Fund in Counties.
1	Adams	$64,850 36	$27,041 63	$4,973 07	$9,049 59	$41,064 29	$23,786 07
2	Allen	237,756 19	55,462 39	4,051 24	87,199 37	146,713 00	91,043 19
3	Bartholomew	94,298 39	32,627 17	4,294 47	21,030 96	57,952 60	36,345 79
4	Boone	78,755 17	32,020 67	15,099 50	. . . . .	47,120 17	31,635 00
5	Blackford	56,452 51	17,118 33	. . . .	20,121 88	37,240 21	19,212 30
6	Boone	83,340 77	38,129 47	6,397 75	11,170 40	55,697 62	27,643 15
7	Brown	21,331 01	13,650 13	800 20	. . . . .	14,450 33	6,880 68
8	Carroll	81,020 77	41,566 57	3,666 07	7,047 64	52,280 28	28,740 49
9	Cass	114,674 24	34,928 12	3,132 63	32,263 24	70,333 99	44,340 35
10	Clark	95,129 64	31,798 83	10,159 60	23,105 51	65,063 94	30,065 70
11	Clay	93,500 65	36,117 89	7,511 88	12,235 50	57,865 27	35,635 38
12	Clinton	102,499 82	41,807 68	6,858 41	21,017 13	69,683 22	32,816 60
13	Crawford	32,193 28	15,754 67	4,351 88	. . . . .	20,106 55	12,086 73
14	Daviess	89,970 77	37,087 71	5,147 36	17,359 50	59,594 57	30,376 20
15	Dearborn	75,492 79	23,659 65	6,345 65	17,877 90	47,883 20	27,609 59
16	Decatur	76,786 54	34,907 53	2,745 47	13,397 40	51,050 40	25,736 14
17	Dekalb	83,815 99	28,477 25	9,310 56	13,171 71	50,959 52	32,856 47
18	Delaware	194,468 69	58,819 05	8,117 28	50,457 99	117,394 32	77,074 37
19	Dubois	60,473 93	28,872 79	4,732 75	4,946 12	38,551 66	21,922 27
20	Elkhart	134 265 46	44,403 22	8,610 02	55,203 44	108,216 68	26,048 78
21	Fayette	43,290 28	15,715 13	1,043 00	13,012 17	29,770 30	13,519 98
22	Floyd	70,786 04	11,912 13	2,286 00	37,793 35	51,991 48	18,794 56
23	Fountain	78,970 65	34,704 93	. . . .	17,593 98	52,298 91	26,671 74
24	Franklin	53,963 30	28,529 39	6,475 35	. . . . .	35,004 74	18,958 56
25	Fulton	59,978 50	31,520 73	10,710 11	. . . . .	42,230 84	17,747 66
26	Gibson	107,353 13	48,921 44	3,862 50	15,164 84	67,948 78	39,404 34
27	Grant	187,964 52	45,744 71	19,373 80	52,222 78	117,341 29	70,623 23
28	Greene	83,023 96	40,161 78	8,371 97	6,154 00	54,687 75	28,336 21

29	Hamilton	99,613 34	45,033 14	7,701 06	17,498 06	70,232 26	29,381 08
30	Hancock	75,722 27	34,490 23	3,329 25	11,621 29	49,440 77	26,281 50
31	Harrison	59,156 86	31,394 79	8,253 44	. . . . .	39,648 23	19,508 63
32	Hendricks	74,211 79	41,481 25	6,283 50	. . . . .	47,764 75	26,447 04
33	Henry	88,435 75	37,426 56	20,615 79	. . . .	58,042 35	30,393 40
34	Howard	98,925 26	31,536 64	2,906 07	29,568 37	64,011 08	34,914 18
35	Huntington	107,050 93	32,775 19	10,307 37	25,469 79	68,552 35	38,498 58
36	Jackson	80,559 78	33,211 05	4,939 91	13,116 50	51,267 46	29,292 32
37	Jasper	68,098 27	31,488 70	4,511 56	7,777 75	43,778 01	24,320 26
38	Jay	86,787 60	35,439 91	3,910 69	18,227 03	57,577 63	29,209 97
39	Jefferson	70,980 22	23,735 89	2,123 84	19,464 95	45,324 68	25,655 54
40	Jennings	50,516 20	23,388 67	1,823 80	6,017 40	12,229 87	19,286 33
41	Johnson	72,005 03	29,821 64	6,773 55	9,477 50	46,072 69	25,932 34
42	Knox	99,392 74	46,871 59	1,704 00	17,977 25	66,452 84	32,839 90
43	Kosciusko	109,455 20	47,562 31	10,928 68	8,671 95	67,162 94	42,492 26
44	Lagrange	58,877 18	34,172 94	7,097 02	. . . . .	41,269 96	17,607 22
45	Lake	179,407 13	49,891 85	20,395 86	38,434 16	108,721 87	70,685 26
46	Laporte	148,982 50	48,417 91	1,346 12	42,268 31	92,032 34	56,950 16
47	Lawrence	71,703 42	32,578 86	3,270 75	13,494 22	49,343 83	22,359 59
48	Madison	252,975 31	58,127 72	15,822 71	84,625 20	158,575 63	94,399 68
49	Marion	290,251 31	73,801 71	. . . .	182,740 80	256,542 51	33,708 80
50	Marshall	89,106 86	38,538 23	11,171 83	8,909 46	58,619 52	30,487 34
51	Martin	37,207 43	18,570 81	4,337 57	. . .	22,908 38	14,299 05
52	Miami	105,132 49	41,212 44	4,929 14	23,706 70	69,848 28	35,284 21
53	Monroe	65,669 42	22,808 19	1,201 25	15,272 75	37,282 19	26,387 23
54	Montgomery	111,460 44	45,429 52	9,739 88	15,172 70	70,342 10	41,118 34
55	Morgan	70,868 16	34,241 16	2,911 95	10,705 00	47,858 11	23,010 05
56	Newton	55,615 39	24,890 21	11,722 75	. . . .	36,612 96	19,002 43
57	Noble	85,030 64	34,278 73	4,943 47	13,324 37	52,546 57	32,484 07
58	Ohio	18,356 97	5,832 00	. . . .	5,288 00	11,120 00	7,236 97
59	Orange	43,088 32	20,480 19	6,990 59	. . . . .	27,470 78	15,617 54
60	Owen	45,703 34	24,539 99	6,401 75	. . . . .	30,941 74	14,761 60
61	Parke	88,987 72	43,897 24	11,592 35	. . . . .	55,489 59	33,498 13
62	Perry	49,066 19	19,975 54	1,041 60	8,032 79	29,043 93	20,016 26
63	Pike	54,568 77	28,511 00	6,041 16	. . .	34,552 16	20,016 61
64	Porter	95,626 74	43,093 98	. . . . .	15,144 00	58,237 98	37,388 76
65	Posey	86,350 81	36,704 68	6,298 95	11,414 32	54,417 95	31,932 86
66	Pulaski	52,632 97	28,997 21	6,356 03	. . . .	35,353 24	17,279 73
67	Putnam	84,715 64	42,121 69	5,627 50	10,090 75	57,839 94	26,875 70
68	Randolph	102,279 65	41,680 68	5,834 18	15,249 43	62,764 29	39,515 36

TUITION RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, 1901-1902—Continued.

Number.	COUNTIES.	Total Revenue for Tuition.	Amount Paid Teachers in Townships.	Amount Paid Teachers in Towns.	Amount Paid Teachers in Cities.	Total Paid Teachers in Counties.	Balance Tuition Fund in Counties.
69	Ripley	$53,924 66	$29,891 14	$8,447 04	. . .	$38,338 18	$15,586 48
70	Rush	76,652 29	35,778 27	3,672 88	$11,081 25	50,532 40	26,119 89
71	Scott	22,106 56	11,145 01	2,645 40	. . .	13,790 41	8,316 15
72	Shelby	105,383 73	46,311 56	1,766 20	18,716 01	66,793 77	38,589 96
73	Spencer	67,004 60	36,791 33	13,568 43	. . . . .	50,359 76	16,644 84
74	Starke	41,357 38	20,128 54	6,547 49	. . . . .	26,676 03	14,681 35
75	St. Joseph	199 545 76	40,712 54	6,357 56	69,672 12	116,742 22	82,803 54
76	Steuben	47,359 61	26,711 21	8,691 45	. . . . .	35,402 66	11,956 95
77	Sullivan	82,550 20	38,921 70	13,859 24	. . . . .	52,780 94	29,769 26
78	Switzerland	31,725 75	15,316 30	1,711 75	3,998 83	21,027 88	10,697 87
79	Tippecanoe	167,940 15	49,103 05	5,744 12	49,178 03	103,825 20	64,114 95
80	Tipton	58,643 55	27,751 13	2,644 00	8,426 71	38,821 84	19,821 71
81	Union	37,841 97	16,849 61	1,103 70	4,668 75	22,622 06	15,219 91
82	Vanderburgh	206,706 37	32,867 79	. . . .	141,083 50	173,951 29	32,755 08
83	Vermillion	54,789 30	27,010 45	6,514 40	6,354 00	39,878 85	14,910 45
84	Vigo	209,317 39	49,747 32	1,376 58	106,759 30	157,883 20	51,434 19
85	Wabash	120,458 11	48,183 17	9,211 52	25,285 97	82,680 66	37,777 45
86	Warren	52 147 44	28,127 89	6,052 50	. . . . .	34,180 39	17,967 05
87	Warrick	58,885 55	29,793 35	9,331 84	. . . . .	39,125 19	19,760 36
88	Washington	57,800 98	31,201 62	9,485 59	. . . . .	40,687 21	17,113 77
89	Wayne	166,404 99	38,410 77	14,787 16	50,240 57	103,438 50	62,966 49
90	Wells	75,601 09	36,127 93	. . . .	11,896 23	48,024 16	27,576 93
91	White	82,067 44	34,627 19	18,515 28	. . .	53,142 47	28,924 97
92	Whitley	64,004 02	3 ,260 95	5,046 22	8,029 90	44,337 07	19,666 95
	Total	$8,281,402 38	$3,132,692 85	$578,495 79	$1,772,749 37	$5,483,938 01	$2,797,464 36

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902.

(From County Superintendents' Reports.)

Number.	COUNTIES.	Total Special School Revenue.	Amount Paid for Building and Repairs in Townships.	Amount Paid for Building and Repairs in Towns.	Amount Paid for Building and Repairs in Cities.	Total Amount Paid for Building and Repairs in County.	Amount Paid for Transfer of Pupils in Townships.	Amount Paid for Transfer of Pupils in Towns.	Amount Paid for Transfer of Pupils in Cities.	Total Amount Paid for Transfer of Pupils in County.
1	Adams	$38,397 70	$5,887 00	$208 24	$125 00	$6,250 24	$1,051 65	$31 00		$1,082 65
2	Allen	144,685 24	14,448 80		17,194 12	31,642 92	3,554 80			3,554 80
3	Bartholomew	47,385 68	3,070 36	30 00	3,740 43	6,840 79	1,543 55			1,543 55
4	Benton	50,563 93	9,459 77	61 25		9,521 02	2,798 09			2,798 09
5	Blackford	34,178 70	3,048 60		541 94	3,590 54	1,335 33			1,335 33
6	Boone	46,598 76	2,441 86	450 00		2,891 86	2,039 15			2,039 15
7	Brown	5,519 42	455 53			455 53	212 70			212 70
8	Carroll	61,811 69	11,860 93	45 37	9,678 34	21,524 64	4,092 65	220 00		4,312 65
9	Cass	71,977 56	5,486 93		1,000 00	6,486 93	2,809 15	27 00		2,836 15
10	Clark	41,805 89	1,644 63	1,357 32		3,001 95	2,385 50	383 75	$136 50	2,905 75
11	Clay	47,397 22	5,900 83	946 14		6,846 97	2,144 70	85 00		2,229 70
12	Clinton	55,013 70	3,312 44	256 00	1,500 00	5,068 44	3,338 49	30 00		3,368 49
13	Crawford	11,488 70	1,851 43			1,851 43	599 27			599 27
14	Daviess	41,036 06	2,020 31	170 00	1,584 80	3,775 11	3,796 00	24 00	13 58	3,833 58
15	Dearborn	28,191 57	1,402 75	222 10	1,655 07	3,279 92	2,280 85	205 10		2,485 95
16	Decatur	45,814 63	16,002 15		3,500 00	19,502 15	715 00			715 00
17	Dekalb	38,252 75	3,585 07	14 73	895 90	4,495 70	1,920 64			1,920 64
18	Delaware	127,918 55	6,294 49		23,564 08	29,858 57	2,145 36			2,145 36
19	Dubois	22,053 00	2,701 79			2,701 79	1,869 85			1,869 85
20	Elkhart	70,640 48	5,450 40		15,000 00	20,450 40	1,935 12	11 00	110 00	2,056 12
21	Fayette	21,826 11	537 74		400 00	937 74	1,278 47			1,278 47
22	Floyd	70,280 22	2,076 79		1,344 34	3,421 13	1,105 75	18 00		1,123 75
23	Fountain	58,816 88	6,205 50		350 00	6,555 50	1,252 00			1,252 00
24	Franklin	16,578 45	719 74	500 00		1,219 74	946 50			946 50
25	Fulton	48,462 21	16,015 56			16,015 56	3,069 05			3,069 05
26	Gibson	53,403 83	12,620 22	2,174 00		14,794 22	2,477 41			2,477 41
27	Grant	101,647 13	8,204 00	4,050 17	4,877 98	17,132 15	5,817 06			5,817 06
28	Greene	29,750 99	3,647 36			3,647 36	1,734 00			1,734 00

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902—Continued.

(From County Superintendents' Report.)

Number.	COUNTIES.	Total Special School Revenue.	Amount Paid for Building and Repairs in Townships.	Amount Paid for Building and Repairs in Towns.	Amount Paid for Building and Repairs in Cities.	Total Amount Paid for Building and Repairs in County.	Amount Paid for Transfer of Pupils in Townships.	Amount Paid for Transfer of Pupils in Towns.	Amount Paid for Transfer of Pupils in Cities.	Total Amount Paid for Transfer of Pupils in County.
29	Hamilton	$65,434 99	$11,683 40	$2,538 41	.....	$14,221 81	$3,369 46	.....	.....	$3,369 46
30	Hancock	45,435 08	7,560 23	138 10	$393 93	8,092 26	3,729 27	.....	.....	3,729 27
31	Harrison	23,261 15	2,103 04	73 25	.....	2,176 29	2,108 06	.....	.....	2,108 06
32	Hendricks	47,719 07	7,444 79	3,000 00	.....	10,444 79	1,547 47	.....	.....	1,547 47
33	Henry	73,990 40	16,595 04	1,072 80	.....	17,667 84	1,999 47	.....	.....	1,999 47
34	Howard	56,683 03	3,304 72	344 40	38 00	3,687 12	2,844 64	.....	.....	2,844 64
35	Huntington	55,081 68	1,395 88	660 70	500 00	2,564 58	1,943 25	.....	$21 00	1,964 25
36	Jackson	33,554 54	1,549 25	.....	.....	1,549 25	1,295 50	.....	.....	1,295 50
37	Jasper	38,456 02	3,843 19	1,212 40	734 54	5,790 13	2,255 53	.....	.....	2,255 53
38	Jay	60,906 17	5,068 03	.....	10,400 33	15,468 36	887 84	.....	.....	887 84
39	Jefferson	23,835 87	1,424 63	64 58	1,595 37	3,084 58	935 12	$50 00	.....	985 12
40	Jennings	20,191 99	5,234 99	113 48	554 52	5,902 99	1,843 36	.....	.....	1,843 36
41	Johnson	37,654 76	406 83	.....	.....	406 83	2,032 10	.....	.....	2,032 10
42	Knox	63,316 77	7,368 01	.....	4,000 00	11,368 01	630 40	.....	.....	630 40
43	Kosciusko	51,797 97	5,897 40	295 00	3,544 94	9,737 34	3,924 44	.....	.....	3,924 44
44	Lagrange	35,868 70	4,905 17	1,100 00	.....	6,005 17	1,952 04	.....	.....	1,952 04
45	Lake	93,864 13	3,852 40	432 67	6,295 66	10,580 73	1,102 61	.....	63 00	1,165 61
46	Laporte	83,205 18	2,590 36	.....	.....	2,590 36	3,292 92	19 00	.....	3,311 92
47	Lawrence	31,754 35	3,951 32	312 76	5,250 22	9,514 30	1,074 43	.....	.....	1,074 43
48	Madison	170,983 50	4,620 53	393 12	35,128 22	40,141 87	4,052 03	36 00	.....	4,088 03
49	Marion	731,733 49	3,854 55	.....	185,219 43	189,073 97	3,641 60	.....	150 00	3,791 60
50	Marshall	50,192 26	4,189 78	243 55	3,417 92	7,851 25	3,271 05	.....	.....	3,271 05
51	Martin	13,957 64	555 97	272 95	.....	828 92	460 45	80 00	.....	540 45
52	Miami	69,283 06	11,329 60	710 39	.....	12,039 99	3,127 40	.....	.....	3,127 40
53	Monroe	26,385 96	3,713 34	68 80	368 95	4,151 09	1,526 75	.....	27 00	1,553 75
54	Montgomery	92,715 25	22,955 58	1,210 84	967 00	25,133 42	4,312 73	.....	90 00	4,402 73
55	Morgan	36,060 75	4,500 20	171 75	1,317 32	5,989 27	2,986 75	.....	.....	2,986 75
56	Newton	27,165 21	1,530 45	260 37	.....	1,790 82	999 60	.....	.....	999 60

57	Noble	45,740 34	10,927 55	44 45		10,972 00	3,113 33			3,113 33
58	Ohio	5,907 78	114 22		49 50	163 72	573 50			573 50
59	Orange	15,727 23	1,451 62	10 00		1,461 62	693 57			693 57
60	Owen	19,335 31	601 06	305 34		906 40	1,652 59			1,652 59
61	Parke	44,522 56	2,079 19	100 00		2,179 19	3,207 86			3,207 86
62	Perry	18,425 66	1,683 88		1,416 61	3,100 49	349 00			349 00
63	Pike	27,275 73	6,314 10	987 00		7,301 10	1,140 67			1,140 67
64	Porter	57,072 14	5,516 62			5,516 62	1,859 00			1,859 00
65	Posey	43,311 85	10,712 13	50 00	300 00	11,062 13	1,779 77			1,779 77
66	Pulaski	32,140 36	5,144 26	225 76		5,670 02	1,474 75			1,474 75
67	Putnam	42,873 41	6,260 44	256 17		6,516 61	2,545 25			2,545 25
68	Randolph	54,430 11	11,864 03	567 20	411 00	12,842 23	932 61	6 75		939 36
69	Ripley	18,667 78	2,083 31	132 44		2,215 75	2,333 60			2,333 60
70	Rush	40,555 91	3,757 59		301 50	4,059 09	2,682 58			2,682 58
71	Scott	7,213 03	2,495 12	27 39		2,522 51	288 85			288 85
72	Shelby	51,951 56	6,349 65		7,494 42	13,844 07	2,828 60			2,828 60
73	Spencer	24,958 44	981 16	62 35		1,043 51	828 75			828 75
74	Starke	28,407 13	4,325 09	2,647 50		6,972 59	830 87			830 87
75	St. Joseph	171,269 00	3 836 83	356 01	18,804 15	22,996 99	3,298 00			3,298 00
76	Steuben	23,995 32	455 00	250 00		705 00	650 90			650 90
77	Sullivan	45,751 59	8,725 77	1,296 65		10,022 42	1,873 10			1,873 10
78	Switzerland	9,947 69	670 82	200 00		870 82	743 86			743 86
79	Tippecanoe	128,602 00	38,861 92	4,090 32	14,000 00	52,952 24	1,541 24		50 00	1,591 24
80	Tipton	50,032 09	7,986 48			7,986 48	2,521 13			2,521 13
81	Union	14,243 51	878 77		46 86	925 63	1,387 02		600 00	1,987 02
82	Vanderburgh	63,786 99	2,974 01		2,703 89	5,677 90	476 00			476 00
83	Vermillion	28,566 03	687 70			687 70	1,037 00			1,037 00
84	Vigo	151,115 58	15,874 47		1,938 14	17,812 61	4,061 75	156 00		4,217 75
85	Wabash	67,593 74	7,913 60			7,913 60	3,219 14			3,219 14
86	Warren	38,864 67	4,616 18			4,616 18	1,743 00			1,743 00
87	Warrick	23,064 97	1,733 23	4,732 50		6,465 73	1,777 39			1,777 39
88	Washington	24,678 16	2,952 84	2,298 23		5,251 07	1,179 62			1,179 62
89	Wayne	84,125 81	5,808 62	126 00	9,000 00	14,934 62	2,559 65			2,559 65
90	Wells	56,042 50	10,891 40			10,891 40	2,017 50			2,017 50
91	White	55,902 76	5,146 00	16,392 77		21,538 77	1,969 24			1,969 24
92	Whitley	39,833 28	13,318 85	798 17	322 52	14,439 54	2,022 01			2,022 01
	Total	$5,247,047 99	$521,715 17	$61,469 89	$403,466 94	$986,652 00	$186,787 06	$1,382 60	$1,261 08	$189,430 74

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902—Continued.

(From County Superintendents' Reports.)

Number.	COUNTIES.	Amount Paid for Supervision in Townships.	Amount Paid for Supervision in Towns.	Amount Paid for Supervision in Cities.	Total Amount Paid for Supervision in County.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Townships.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Towns.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Cities.	Total Amount Paid Teachers in County for Attending Institutes.
1	Adams	....	....	$1,200 00	$1,200 00	$2 226 50	$160 47	$362 84	$2,749 81
2	Allen	$218 00	$455 00	3,000 00	3,673 00	3,998 08	39 25	....	4,037 33
3	Bartholomew	....	....	2,600 00	2,600 00	2,602 23	207 79	661 97	3,471 99
4	Benton	323 00	993 50	.....	1,316 50	2,578 34	511 82	.....	3,090 16
5	Blackford	.....	....	2,965 00	2,965 00	1,329 43	.....	499 80	1,829 23
6	Boone	....	1,650 00	590 00	2,240 00	3,089 23	.....	....	3,089 23
7	Brown	36 00	....	.....	36 00	767 08	....	....	767 08
8	Carroll	106 50	131 73	....	238 23	3,563 92	100 60	133 33	3,797 85
9	Cass	232 00	..	2,675 00	2,907 00	2,591 93	.....	....	2,591 93
10	Clark	....	1,106 27	3,342 50	4,448 77	2,622 21	58 55	857 84	3,538 60
11	Clay	306 00	140 00	1,930 00	2,376 00	2,566 16	162 30	355 42	3,083 88
12	Clinton	.....	269 33	3,200 00	3,469 33	3,768 22	292 00	.....	4,060 22
13	Crawford	35 00	152 98	... ..	187 98	1,015 29	78 50	.....	1,093 79
14	Daviess	....	120 00	..	120 00	2,898 87	167 00	394 90	3,460 77
15	Dearborn	144 00	79 00	2,330 00	2,553 00	1,892 46	186 47	435 65	2,314 58
16	Decatur	101 65	.....	...	101 65	3,039 55	84 12	.....	3,123 67
17	Dekalb	24 12	619 02	1,300 00	1,943 14	2,076 59	58 00	.....	2,134 59
18	Delaware	....	902 50	3,000 00	3,902 50	3,027 77	....	.....	3,027 77
19	Dubois	156 35	15 00	489 00	660 35	1,752 08	21 30	110 88	1,884 26
20	Elkhart	....	380 57	4,980 00	5,360 57	2,616 48	232 57	1,292 93	4,141 98
21	Fayette	384 00	49 00	1,250 00	1,683 00	1,298 52	35 00	282 73	1,616 25
22	Floyd	....	....	2,200 00	2,200 00	655 35	69 00	....	724 35
23	Fountain	103 03	..	800 00	903 03	2,586 92	....	99 01	2,685 93
24	Franklin	....	343 00	.....	343 00	2,302 32	480 06	.....	2,782 38
25	Fulton	4,662 36	1,638 00	.....	6,300 36	2,730 88	.....	.....	2,730 88
26	Gibson	97 35	..	1,000 00	1,097 35	3,615 82	95 75	....	3,711 57
27	Grant	128 00	1,477 50	2,350 00	3,955 50	3,717 98	239 75	155 13	4,112 86
28	Greene	50 00	900 00	.....	950 00	2,727 18	102 00	180 91	3,010 09

29	Hamilton	230 00	212 50	1,000 00	1,442 50	3,448 36				4,448 36
30	Hancock	152 00	75 00	900 00	1,127 00	2,707 43	223 65	324 79		3,285 27
31	Harrison	258 00			258 00	2,668 84	119 32			2,788 16
32	Hendricks		100 00		100 00	3,362 97	434 25			3,797 22
33	Henry	472 40	1,932 69		2,405 09	2,140 93	168 64			2,309 57
34	Howard		681 25	1,600 00	2,281 25	2,427 52	102 82	681 14		3,211 48
35	Huntington	91 00	846 69	1,800 00	2,737 69	2,485 43	213 11			2,698 54
36	Jackson		782 84	792 50	1,575 34	2,417 56				2,417 56
37	Jasper		742 50	1,250 00	1,992 50	2,829 70	136 50	222 35		3,188 55
38	Jay	300 00	680 00	1,200 00	2,180 00	3,068 70	116 11	457 00		3,641 81
39	Jefferson					1,961 24	157 97			2,119 21
40	Jennings		52 50		52 50	1,844 21				1,844 21
41	Johnson	482 00	32 00	2,930 00	3,444 00	2,317 17	125 72	168 75		2,611 64
42	Knox	280 00		2,000 00	2,280 00	3,867 22	171 52			4,038 74
43	Kosciusko	28 00	440 00		468 00	3,713 91	228 56			3,942 47
44	Lagrange	620 00			620 00	2,921 58	37 10			2,958 68
45	Lake	280 00	557 14	1,861 69	2,798 83	3,277 50	188 29	100 99		3,566 78
46	Laporte	278 51	80 00		358 51	2,299 06				2,299 06
47	Lawrence					2,995 65	114 11			3,109 76
48	Madison	225 35	1,045 00	6,970 42	8,240 77	3,813 24	355 42			4,168 66
49	Marion	519 00		105,040 00	105,559 00	4,118 01				4,118 01
50	Marshall	535 23	500 00		1,035 23	3,069 11	77 20			3,146 31
51	Martin		520 00		520 00	1,128 83	18 48			1,147 31
52	Miami	125 00	937 60	2,095 00	3,157 60	3,507 73	208 55	459 42		4,175 70
53	Monroe		86 00	1,133 72	1,219 72	1,487 29	46 25	285 00		1,818 54
54	Montgomery	210 70	300 00	325 00	835 70	3,762 26	237 16			3,999 42
55	Morgan		400 00	1,200 00	1,600 00	2,856 92	101 60	324 65		3,283 17
56	Newton	18 00	1,630 00		1,648 00	1,733 07	208 02			1,941 09
57	Noble	124 50			124 50	2,525 65	183 33	267 46		2,976 44
58	Ohio			120 00	120 00	372 95		108 25		481 20
59	Orange		90 00		90 00	2,207 00	409 36			2,616 36
60	Owen	355 01	800 00		1,155 01	1,869 60	60 25			1,929 85
61	Parke		120 00		120 00	3,688 43	312 23			4,000 66
62	Perry	44 00		100 00	144 00	2,150 91	40 05			2,190 96
63	Pike	131 00	700 00		831 00	2,349 18	236 66			2,585 84
64	Porter	32 00			32 00	2,107 97				2,107 97
65	Posey			1,724 00	1,724 00	2,890 09	160 00	327 48		3,377 57
66	Pulaski	746 97	1,170 00		1,916 97	2,272 25	187 50			2,459 75
67	Putnam		206 00	875 00	1,081 00	3,336 84	142 72	159 68		3,639 24
68	Randolph	300 00	380 00	1,686 37	2,366 37	3,527 75	99 86	387 90		4,015 51

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902—Continued.

(From County Superintendents' Reports.)

Number.	COUNTIES.	Amount Paid for Supervision in Townships.	Amount Paid for Supervision in Towns.	Amount Paid for Supervision in Cities.	Total Amount Paid for Supervision in County.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Townships.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Towns.	Amount of Special School Revenue Paid Teachers for Attending Institutes in Cities.	Total Amount Paid Teachers in County for Attending Institutes.
69	Ripley	$142 10	$65 00		$207 10	$2,492 47	$387 20		$2,879 67
70	Rush	105 00		$1,550 00	1,655 00	3,392 36		$668 15	3,960 51
71	Scott		167 00		167 00	572 27	36 20		608 47
72	Shelby		77 63	1,800 00	1,877 63	2,236 85	94 99		2,331 84
73	Spencer	139 05	1,151 25		1,290 30	2,744 15	157 79		2,901 94
74	Starke	12 00			12 00	1,754 97	298 92		2,053 89
75	St. Joseph	246 40	89 23	6,140 00	6,475 63	2,385 38			2,385 38
76	Steuben		945 00		945 00	1,484 80	134 56		1,619 36
77	Sullivan		855 54		855 54	3,515 89	388 55		3,904 44
78	Switzerland	45 00	25 00	391 67	461 67	941 29			941 29
79	Tippecanoe			1,900 00	1,900 00	4,251 40			4,251 40
80	Tipton		172 00	547 49	719 49	2,305 05	179 60		2,484 65
81	Union	313 55	100 00	129 37	542 92	1,351 56	40 20	1,152 75	2,544 51
82	Vanderburgh	190 86			190 86	1,805 37			1,805 37
83	Vermillion	368 50	1,425 00		1,793 50	2,292 98	104 65	144 33	2,541 96
84	Vigo			3,000 00	3,000 00	1,721 66	44 55		1,766 21
85	Wabash	23 50	1,486 41	1,850 00	3,359 91	3,167 71	174 55	520 00	3,862 26
86	Warren	125 00	900 00		1,025 00	2,175 61	94 49		2,270 10
87	Warrick	75 72	37 50		113 22	1,449 97			2,449 97
88	Washington	382 20	923 64		1,305 84	2,931 69	283 74		3,215 43
89	Wayne	239 20	1,121 25	2,000 00	3,360 45	2,342 48	302 92		2,645 40
90	Wells			1,860 00	1,860 00	3,025 22		220 00	3,245 22
91	White		1,789 50		1,789 50	3,056 60	461 30		3,517 90
92	Whitley		700 00	222 22	922 22	2,530 49	305 64	189 00	3,025 13
	Total	$16,463 11	$39,553 06	$199,195 95	$255,212 12	$233,845 67	$12,493 86	$12,992 43	$259,331 96

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902—Continued.

(From County Superintendents' Reports.)

Number.	COUNTIES.	Amount Otherwise Expended in Townships Since July 31, 1901.	Amount Otherwise Expended in Towns Since July 31, 1901.	Amount Otherwise Expended in Cities Since July 31, 1901.	Total Amount Otherwise Expended in County Since July 31, 1901.	Amount on Hand in Townships July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Amount on Hand in Towns July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Amount on Hand in Cities July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Total Amount on Hand in County July 31, 1902, Including Amount Due Corporation Still in County Treasury.
1	Adams	$8,729 44	$1,261 15	$3,711 52	$13,702 11	$11,200 35	$1,262 98	$949 56	$13,412 89
2	Allen	14,521 76	887 82	27,872 89	43,272 47	15,037 15	1,001 78	42,465 79	58,504 72
3	Bartholomew	6,403 00	1,036 28	5,988 73	13,428 01	6,098 62	1,308 82	12,093 90	19,501 34
4	Benton	9,565 00	.....	.....	17,451 13	13,052 79	3,334 24	.....	16,387 03
5	Blackford	6,212 53	.....	5,402 86	11,615 39	5,071 73	.....	7,771 48	12,843 21
6	Boone	11,864 62	1,671 91	5,319 87	18,856 40	13,932 15	2,972 92	577 05	17,482 12
7	Brown	2,098 33	161 95	.....	2,260 28	1,680 88	106 95	.....	1,787 83
8	Carroll	15,344 09	1,0 8 18	9,185 38	25,597 65	4 309 09	1,318 78	712 80	6,340 67
9	Cass	13,215 64	1,330 43	12,847 00	27,393 07	9,989 18	1,287 05	18,486 25	29,762 48
10	Clark	5,930 08	2,360 88	5,290 07	13,581 03	3,061 47	975 69	10,292 63	14,329 79
11	Clay	7,835 48	3,095 08	4,698 51	15,629 07	5,399 33	378 31	11,453 96	17,231 60
12	Clinton	14,556 58	2,209 60	9,297 23	26,063 41	9,931 41	1,862 65	989 75	12,783 81
13	Crawford	2,523 26	1,478 14	.....	4,001 40	2,795 67	959 16	.....	3,754 83
14	Daviess	7,773 90	3,485 01	7,903 18	19,162 09	6,504 85	1,777 27	2,402 39	10,684 51
15	Dearborn	4,810 28	1,153 19	4,980 45	10,943 92	2,200 84	1,212 35	3,201 01	6,614 20
16	Decatur	8,555 91	611 75	2,995 65	12,163 31	9,848 63	354 87	5 35	10,208 85
17	Dekalb	8,388 04	2,935 24	6,087 62	17,410 90	5,518 97	1,906 43	2,922 38	10,347 78
18	Delaware	23,636 79	3,125 83	25,093 65	51,856 27	26,665 35	5,439 09	5,023 64	37,128 08
19	Dubois	6,162 52	799 68	2 834 29	9,796 49	3,022 47	917 66	1,200 13	5,140 26
20	Elkhart	14,458 61	4,041 92	9,197 11	27,697 64	4,459 79	5,897 73	576 25	10 933 77
21	Fayette	5,678 12	311 43	3,837 21	9,826 76	4,770 00	*332 03	2,045 92	6,483 89
22	Floyd	2,264 28	211 84	18,035 86	20,511 98	3,580 09	966 53	37,752 39	42,299 01
23	Fountain	23,065 24	.....	9,034 20	32,099 44	11,062 65	.....	4,258 33	15,320 98
24	Franklin	4,195 94	1,497 62	.....	5,693 56	3,976 18	1,617 09	.....	5,593 27
25	Fulton	5,725 35	3,579 54	.....	9,304 89	5,394 82	5,646 65	.....	11,041 47
26	Gibson	12,479 80	1,379 39	81 51	13,940 70	10,929 86	1,429 94	5,022 78	17,382 58
27	Grant	12,085 53	7,731 49	19,974 17	39,791 19	11,229 66	6,025 94	13,582 77	30,838 37
28	Greene	9,090 47	2,647 48	2,242 66	13,980 61	5,747 00	1,402 45	*729 52	6,419 93

* Overdrawn.

RECEIPTS AND EXPENDITURES FOR THE MAINTENANCE OF SCHOOLS, YEAR ENDING JULY 31, 1902—Continued.

(From County Superintendents' Reports.)

Number.	COUNTIES.	Amount Otherwise Expended in Townships Since July 31, 1901.	Amount Otherwise Expended in Towns Since July 31, 1901.	Amount Otherwise Expended in Cities Since July 31, 1901.	Total Amount Otherwise Expended in County Since July 31, 1901.	Amount on Hand in Townships July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Amount on Hand in Towns July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Amount on Hand in Cities July 31, 1902, Including Amount Due Corporation Still in County Treasury.	Total Amount on Hand in County July 31, 1902, Including any Amount Due Corporation Still in County Treasury.
29	Hamilton	$14,117 26	$2,479 63	$10,509 25	$27,106 14	$12,362 76	$2,051 98	$1,431 98	$15,846 72
30	Hancock	11,253 23	621 06	3,658 78	15,533 09	8,847 75	799 51	4,020 95	13,668 21
31	Harrison	5,599 54	1,654 55	. . . . .	7,254 09	3,910 21	4,766 34	. . . . .	8,676 55
32	Hendricks	20,024 18	951 19	. . . . .	20,975 37	7,505 84	3,348 38	. . . . .	10,854 22
33	Henry	14,183 99	10,994 92	. . . . .	25,178 91	12,948 64	11,480 88	. . . . .	24,429 52
34	Howard	10,131 12	746 22	17,138 05	28,018 39	3,575 58	1,364 13	11,700 44	16,640 15
35	Huntington	12,710 24	2,709 61	12,589 30	28,009 15	5,593 50	2,882 33	8,681 64	17,107 47
36	Jackson	7,040 32	1,201 60	5,622 73	16,864 65	4,152 65	2421 35	3,278 24	9,852 24
37	Jasper	10,428 38	1,781 30	2,099 23	14,308 91	5,704 69	1,050 50	4,165 21	10,920 40
38	Jay	11,751 37	2,445 25	9 245 17	23,424 79	8,309 94	1,742 04	5,170 39	15,302 37
39	Jefferson	3,747 66	399 45	5,123 66	9,270 77	5,177 40	241 32	2,487 47	8,406 19
40	Jennings	3,754 55	453 38	1,323 79	5,531 72	3,818 08	261 93	937 20	5,017 21
41	Johnson	9,308 32	4,104 68	2,615 82	16,028 82	8 317 78	2,222 30	2,591 29	13,131 37
42	Knox	13,619 04	189 47	10,160 41	23,968 92	13,143 98	67 99	7,818 73	21,030 70
43	Kosciusko	10,505 31	4,373 27	. . . . .	14,878 58	8,161 18	4,859 15	5,526 51	18,847 14
44	Lagrange	13,926 39	4,742 81	. . . . .	18,669 20	4,701 71	961 90	. . . .	5,663 61
45	Lake	11,947 95	9,547 80	19,618 00	41,113 75	12,257 94	2,276 99	13,103 50	34,638 43
46	Laporte	12,772 37	600 00	39,621 66	52,393 43	13,153 86	76 32	9,021 72	22,251 90
47	Lawrence	8,052 10	1,959 95	1,450 00	11,462 05	3,192 32	815 71	2,585 78	6,593 81
48	Madison	20,653 32	7,152 48	49,663 87	86,469 67	15,186 23	5,659 86	5,828 41	26,974 50
49	Marion	19,477 17	. . .	333,075 34	352,552 51	10,061 34	. . .	66,577 05	76,638 39
50	Marshall	9,617 11	5,959 75	5,312 67	20,889 53	10,324 25	3,674 64	. . .	13,998 89
51	Martin	3,909 93	1,379 09	. . . . .	5,289 02	3,788 24	1,843 70	. . .	5,631 94
52	Miami	17,173 36	1,935 04	13,032 72	32,141 12	7,800 87	5,806 39	1,033 99	14,641 25
53	Monroe	5,559 98	475 26	5,921 58	11,956 82	3,287 72	412 32	1,986 00	5,686 04
54	Montgomery	22,931 29	4,378 64	6,509 26	33,819 19	15,157 45	1,301 15	8,066 19	24,524 79
55	Morgan	10,849 02	695 77	5,891 98	17,436 77	4,678 60	927 01	*810 82	1,764 79
56	Newton	7,293 37	5,567 58	. . . . .	12,860 95	4,266 34	3,658 41	. . . . .	7,924 75

57	Noble	8,441 33	1,189 96	8,104 33	17,735 62	2,689 39	1,162 11	6,966 95	10,818 45
58	Ohio	810 79		1,777 87	2,588 66	515 19		1,465 46	1,980 65
59	Orange	2,929 37	2,852 54		5,781 91	2,263 37	2,817 40		5,083 77
60	Owen	4,594 75	1,321 68		5,919 43	3,300 74	4,471 29		7,772 03
61	Parke	14,790 61	4,963 78		19,754 39	14,513 53	746 93		15,260 46
62	Perry	3,837 51	233 50	2,671 17	6,742 18	2,340 65	461 69	3,096 69	5,899 03
63	Pike	6,168 07	1,741 87		7,909 94	4,801 84	2,705 34		7,507 18
64	Porter	19,312 09	14,445 45		33,757 54	11,546 12	2,252 89		13,799 01
65	Posey	12,070 25	1,396 18	3,672 43	17,138 86	5,330 14	1,183 92	1,715 46	8,229 52
66	Pulaski	7,579 75	2,272 18		9,851 93	8,166 32	2,600 62		10,766 94
67	Putnam	9,843 59	1,462 92	3,866 25	15,172 76	9,663 06	1,667 34	2,588 15	13,918 55
68	Randolph	9,808 77	2,645 53	7,707 44	20,161 74	4,852 32	2,004 33	7,248 25	14,104 90
69	Ripley	3,241 97	2,291 18		5,533 15	3,614 36	1,884 15		5,498 51
70	Rush	10,516 36	1,234 67	3,503 34	15,254 37	5,652 72	808 06	6,483 58	12,944 36
71	Scott	2,961 22	589 62		3,550 84	398 47	*323 11		75 36
72	Shelby	12,875 18	931 00		13,806 18	10,416 16	37 91	6,809 17	17,263 24
73	Spencer	6,147 28	6,218 21		12,365 49	5,531 37	997 08		6,528 45
74	Starke	8,910 12	3,664 69		12,574 81	4,406 08	1,556 89		5,962 97
75	St. Joseph	12,542 79	2,389 22	100,027 06	114,959 04	9,070 07	594 49	11,489 40	21,153 96
76	Steuben	8,773 58	3,644 01		12,417 59	7,399 37	258 10		7,657 47
77	Sullivan	8,150 82	3,386 90		11,537 72	12,197 70	5,360 67		17,558 37
78	Switzerland	3,121 22	361 43	680 57	4,163 22	1,680 84	127 84	958 15	2,766 83
79	Tippecanoe	18,658 95	1,231 13	16,092 15	35,982 23	18,677 92	2,539 55	10,707 42	31,924 89
80	Tipton	18,775 14	2,924 07	2,652 98	24,352 16	7,378 67	311 50	4,278 01	11,968 18
81	Union	3,038 61	581 54	*517 94	4,138 09	3,774 19	831 15		4,105 34
82	Vanderburgh	8,149 71		57,949 04	66,098 75	8,990 20		*19,452 09	*10,461 89
83	Vermillion	6,785 46	2,620 06	3,826 32	13,231 84	7,655 63	1,166 35	452 05	9,274 03
84	Vigo	19,543 46	518 00	56,558 81	76,620 27	12,000 06	64 98	35,633 70	47,698 74
85	Wabash	16,826 48	2,962 10	9,151 90	28,940 48	17,251 59	1,976 52	1,070 24	20,298 35
86	Warren	7,569 94	1,685 54		9,255 48	17,092 82	2,862 09		19,954 91
87	Warrick	5,646 09	2,345 80		7,991 89	4,274 70	*7 93		4,266 77
88	Washington	3,737 10	4,022 80		7,759 90	5,117 02	849 28		5,966 30
89	Wayne	14,948 77	5,614 53	14,733 52	35,296 82	13,513 84	5,741 32	6,073 71	25,328 87
90	Wells	17,531 72		6,020 45	23,552 17	12,605 13		1,871 08	14,476 21
91	White	8,870 44	6,472 03		15,342 47	8,342 74	3,402 14		11,744 88
92	Whitley	9,972 54	1,388 56	1,909 84	13,270 94	2,518 17	1,290 35	2,344 92	6,153 44
	Total	$935,976 23	$232,054 39	$1,062,917 70	$2,230,948 32	$705,584 32	$179,359 37	$440,529 16	$1,325,472 85

*Overdrawn.

NUMBER OF SCHOOLHOUSES ERECTED, VALUE OF SCHOOL PROPERTY, ETC., 1901–1902.

Number.	COUNTIES.	Estimated Value of School Property Including Grounds, Seats, Desks, etc.	Estimated Value of School Apparatus.	Total Value School Property.	Number Schoolhouses Erected During Year.	Value of Houses Erected.
1	Adams	$175,950 00	$10,075 00	$186,025 00	3	$7,993 00
2	Allen	729,200 00	21,710 00	750,910 00	6	22,992 00
3	Bartholomew	235,600 00	9,650 00	245,250 00	. . .	. . . . .
4	Benton	144,950 00	12,170 00	157,120 00	2	6,800 00
5	Blackford	153,300 00	4,500 00	157,800 00	5	20,772 00
6	Boone	234,925 00	9,325 00	244,250 00	. . . .	. . . . .
7	Brown	27,800 00	2,075 00	29,875 00	. . . .	. . . . .
8	Carroll	191,800 00	8,235 00	200,035 00	5	5,120 00
9	Cass	370,500 00	10,550 00	381,050 00	1	2,550 00
10	Clark	189,650 00	8,550 00	198,200 00	4	4,400 00
11	Clay	226,302 00	6,990 00	233,292 00	. . .	. . . . .
12	Clinton	252,700 00	24,100 00	276,800 00	2	2,729 00
13	Crawford	38,920 00	4,155 00	43,075 00	5	1,698 00
14	Daviess	245,600 00	10,502 00	255,902 00	2	2,800 00
15	Dearborn	122,225 00	7,725 00	129,950 00	1	425 00
16	Decatur	163,000 00	11,250 00	174,250 00	3	17,178 00
17	Dekalb	228,300 00	10,430 00	238,730 00	1	2,343 00
18	Delaware	402,100 00	13,175 00	415,275 00	5	27,550 00
19	Dubois	82,005 00	5,950 00	87,955 00	3	1,950 00
20	Elkhart	564,100 00	25,350 00	589,450 00	1	2,000 00
21	Fayette	111,500 00	3,050 00	114,550 00	. . . .	. . . . .
22	Floyd	257,000 00	5,955 00	262,955 00	. . . .	. . . . .
23	Fountain	203,250 00	11,500 00	214,750 00	1	945 00
24	Franklin	87,100 00	6,430 00	93,520 00	4	13,316 00
25	Fulton	188 036 00	11,415 00	199,451 00	. . . .	. . . . .
26	Gibson	257,905 00	15,455 00	273,360 00	6	10,600 00
27	Grant	569,650 00	20,100 00	589,750 00	4	29,600 00
28	Greene	142,891 00	6,420 00	149,311 00	4	2,370 00
29	Hamilton	317,000 00	15,500 00	332,500 00	6	21,000 00
30	Hancock	228,900 00	5,500 00	234,400 00	. . .	. . . . .
31	Harrison	85,412 00	6,296 00	91,708 00	2	1,000 00
32	Hendricks	241,400 00	11,050 00	252,450 00	. . . .	. . . . .
33	Henry	286,350 00	8,405 00	294,755 00	3	13,425 00
34	Howard	269,426 00	6,240 00	275,666 00	1	5,000 00
35	Huntington	342,400 00	14,225 00	356,625 00	1	2,500 00
36	Jackson	193,750 00	7,735 00	201,485 00	. . . .	. . . . .
37	Jasper	115,020 00	9,550 00	124,570 00	3	2,500 00
38	Jay	246,800 00	11,600 00	258,400 00	2	2,000 00
39	Jefferson	109,600 00	7,100 00	116,700 00	1	500 00
40	Jennings	55,150 00	3,785 00	58,935 00	1	3,100 00
41	Johnson	178,800 00	8,836 00	187,636 00	. . . .	. . . . .
42	Knox	257,300 00	12,500 00	269,800 00	. . . .	. . . . .
43	Kosciusko	248,300 00	11,775 00	260,075 00	2	3,113 00
44	Lagrange	179,650 00	9,555 00	189,205 00	1	3,300 00
45	Lake	489,702 00	20,325 00	510,027 00	5	12,420 00
46	Laporte	375,400 00	17,303 00	392,703 00	1	400 00
47	Lawrence	134,500 00	7,185 00	141,685 00	3	2,925 00
48	Madison	843,450 00	58,910 00	902,360 00	3	52,750 00
49	Marion	2,085,393 00	271,763 00	2,357,156 00	9	134,868 00
50	Marshall	228,700 00	13,200 00	241,900 00	2	2,943 00
51	Martin	59,450 00	3,000 00	62,450 00	. . .	. . . . .
52	Miami	285,850 00	12,350 00	298,200 00	1	10,010 00

NUMBER OF SCHOOLHOUSES ERECTED, VALUE OF SCHOOL PROPERTY, ETC., 1901-1902—Continued.

Number.	COUNTIES.	Estimated Value of School Property Including Grounds, Seats, Desks, etc.	Estimated Value of School Apparatus.	Total Value School Property.	Number School-houses Erected During Year.	Value of Houses Erected.
53	Monroe	$171,300 00	$7,000 00	$178,300 00	4	$6,700 00
54	Montgomery	440,600 00	18,875 00	459,475 00	3	16,000 00
55	Morgan	133,325 00	6,400 00	139,725 00	3	9,800 00
56	Newton	79,250 00	5,250 00	84,500 00	1	500 00
57	Noble	200,300 00	10,900 00	211,200 00	1	7,000 00
58	Ohio	37,300 00	1,450 00	38,750 00	....	....
59	Orange	67,100 00	4,270 00	71,370 00	2	950 00
60	Owen	68,800 00	3,835 00	72,635 00	....	.....
61	Parke	145,900 00	10,845 00	156,745 00	1	727 00
62	Perry	80,250 00	7,115 00	87,365 00	5	6,800 00
63	Pike	74,365 00	2,690 00	77,055 00	3	1,500 00
64	Porter	267,118 00	22,800 00	289,918 00	2	6,868 00
65	Posey	175,450 00	14,200 00	189,650 00	4	8,700 00
66	Pulaski	106,558 00	7,960 00	114,518 00	4	2,832 00
67	Putnam	166,890 00	10,220 00	177,110 00	2	1,712 00
68	Randolph	234,999 00	16,075 00	251,074 00	5	25,087 00
69	Ripley	118,250 00	6,065 00	124,315 00	1	800 00
70	Rush	197,500 00	6,400 00	203,900 00	1	1,850 00
71	Scott	46,950 00	3,375 00	50,325 00	3	1,900 00
72	Shelby	286,800 00	7,000 00	293,800 00	1	1,504 24
73	Spencer	115,700 00	4,635 00	120,335 00	2	2,150 00
74	Starke	97,300 00	7,850 00	105,150 00	4	42,800 00
75	St. Joseph	607,600 00	50,405 00	658,005 00	....	.....
76	Steuben	147,500 00	9,600 00	157,100 00	....	.....
77	Sullivan	177,070 00	6,150 00	183,220 00	4	3,770 45
78	Switzerland	51,560 00	3,740 00	55,300 00	3	1,740 00
79	Tippecanoe	533,878 00	36,350 00	570,228 00	4	27,028 00
80	Tipton	130,667 00	5,295 00	135,962 00	2	6,000 00
81	Union	101,900 00	4,175 00	106,075 00	....	.....
82	Vanderburgh	892,335 00	25,825 00	918,160 00	3	11,100 00
83	Vermillion	127,875 00	7,025 00	134,900 00	....	.....
84	Vigo	607,355 00	21,635 00	628,990 00	2	4,400 00
85	Wabash	342,500 00	9,375 00	351,875 00	1	4,500 00
86	Warren	78,300 00	5,245 00	84,545 00	2	1,720 00
87	Warrick	149,900 00	10,275 00	160,175 00	2	20,548 00
88	Washington	87,175 00	5,655 00	92,830 00	2	1,355 00
89	Wayne	526,850 00	21,650 00	548,500 00	1	1,500 00
90	Wells	235,850 00	5,525 00	241,375 00	3	7,595 00
91	White	167,725 00	8,350 00	176,075 00	4	41,000 00
92	Whitley	172,600 00	4,700 00	177,300 00	2	11,600 00
	Total	$22,904,607 00	$1,277,455 00	$24,182,062 00	202	$751,021 69

AVERAGE LENGTH OF SCHOOL IN DAYS, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	In Town s	In Towns.	In Cities.	In Counties.
1	Adams	119	165	180	155
2	Allen	140	167	186	164
3	Bartholomew	130	137	180	143
4	Benton	136	172	. . . . .	154
5	Blackford	152	. . .	180	166
6	Boone	124	160	160	142
7	Brown	84	113	. . . . .	99
8	Carroll	128	159	180	156
9	Cass	128	147	180	151
10	Clark	121	166	175	154
11	Clay	124	143	180	149
12	Clinton	131	144	180	152
13	Crawford	89	124	. . . . .	107
14	Daviess	120	130	180	143
15	Dearborn	120	159	181	150
16	Decatur	137	132	180	150
17	Dekalb	123	167	180	157
18	Delaware	140	170	185	165
19	Dubois	111	137	162	136
20	Elkhart	135	153	180	156
21	Fayette	131	. . . . .	180	147
22	Floyd	130	130	180	161
23	Fountain	123	. . . .	173	134
24	Franklin	136	161	. . . . .	140
25	Fulton	123	170	. . . .	146
26	Gibson	126	170	175	157
27	Grant	140	166	178	161
28	Greene	114	160	160	145
29	Hamilton	125	160	160	150
30	Hancock	122	160	170	141
31	Harrison	96	126	. . . .	111
32	Hendricks	127	145	. . . . .	129
33	Henry	131	157	. . . . .	139
34	Howard	127	160	180	134
35	Huntington	127	149	185	154
36	Jackson	120	127	180	142
37	Jasper	127	168	180	158
38	Jay	130	162	177	156
39	Jefferson	105	125	180	137
40	Jennings	107	150	180	116
41	Johnson	127	160	180	156
42	Knox	125	120	200	148
43	Kosciusko	132	151	180	154
44	Lagrange	138	160	. . . . .	141
45	Lake	170	187	195	184
46	Laporte	168	160	187	172
47	Lawrence	120	160	180	153
48	Madison	137	161	180	159
49	Marion	145	. . . . .	200	150
50	Marshall	119	163	180	154
51	Martin	83	127	. . . . .	105
52	Miami	122	158	180	153

AVERAGE LENGTH OF SCHOOL IN DAYS, YEAR ENDING JULY 31, 1902—Continued.

Number.	COUNTIES.	In Townships.	In Towns.	In Cities.	In Counties.
53	Monroe	84	125	180	130
54	Montgomery	129	150	180	153
55	Morgan	122	160	180	154
56	Newton	139	165	.....	146
57	Noble	139	175	180	165
58	Ohio	138	....	160	148
59	Orange	97	141	....	119
60	Owen	104	158	.....	131
61	Parke	131	150	....	141
62	Perry	81	130	148	120
63	Pike	103	150	.....	126
64	Porter	171	180	.....	175
65	Posey	140	170	180	163
66	Pulaski	122	161	....	142
67	Putnam	124	143	175	147
68	Randolph	124	147	173	148
69	Ripley	122	153	....	131
70	Rush	133	160	180	158
71	Scott	91	158	...	102
72	Shelby	123	136	172	144
73	Spencer	118	135	....	126
74	Starke	131	153	.....	142
75	St. Joseph	155	153	180	163
76	Steuben	117	153	.....	135
77	Sullivan	125	159	....	137
78	Switzerland	112	125	160	120
79	Tippecanoe	140	180	190	170
80	Tipton	123	160	180	135
81	Union	156	175	180	162
82	Vanderburgh	167	....	200	184
83	Vermillion	139	177	180	165
84	Vigo	131	150	190	157
85	Wabash	131	170	180	157
86	Warren	122	147	.....	135
87	Warrick	96	155	.....	126
88	Washington	106	122	.....	114
89	Wayne	144	161	187	164
90	Wells	125	.	190	132
91	White	127	157	.	142
92	Whitley	140	165	180	162
	Total	126	153	179	146

Number.	COUNTIES.	Town and City Libraries.				Township Libraries.				Young People's Reading Circles.			
		Number Volumes in Town and City Libraries.	Number Volumes Added During Year.	Total.	Volumes Taken Out During Year.	Number Volumes in Libraries.	Number Volumes Added.	Total.	Number Volumes Taken Out During Year.	Number Volumes in Libraries.	Number Volumes Added.	Total.	Number Members Y. P. R. C.
1	Adams	6,831	. . .	6,831	. . .	5,124	491	5,615	. . .	5,124	491	5,615	4,924
2	Allen	11,728	737	12,465	45,646	2,653	40	2,693	. . .	4,275	873	5,148	1,584
3	Bartholomew	5,895	405	6,300	23,656	970	. . .	970	. . .	2,782	312	3,094	1,605
4	Benton	1,669	136	1,805	604	279	4	283	. . .	4,668	703	5,371	1,045
5	Blackford	2,800	500	3,300	3,200	. .	.	. .	. .	2,039	780	2,819	1,600
6	Boone	2,243	94	2,337	2,294	1,253	49	1,302	2,012	650	184	834	1,279
7	Brown	522	. . .	522	. . .	. .	.	. .	. .	. .	. .	. .	. .
8	Carroll	8,813	768	9,581	7,413	5,703	565	6,268	6,807	3,983	432	4,415	1,113
9	Cass	11,600	520	12,120	31,629	3,153	150	3,203	5,462	3,080	215	3,295	3,661
10	Clark	6,653	250	6,903	12,962	3,153	150	3,303	5,162	3,080	215	3,295	3,661
11	Clay	727	22	749	362	377	22	399	162	3,207	1,497	4,704	4,782
12	Clinton	4,418	261	4,679	6,500	1,568	146	1,714	1,500	3,003	320	3,323	864
13	Crawford	1,793	5	1,798	441	1,458	. . .	1,458	118	1,502	445	1,947	2,592
14	Daviess	2,366	175	2,541	4,621	. .	. .	. .	. .	3,258	313	3,571	1,311
15	Dearborn	2,404	56	2,460	1,202	870	. . .	870	100	1,420	374	1,794	384
16	Decatur	2,256	677	2,933	4,238	1,163	. . .	1,163	90	7,731	1,120	8,851	2,059
17	Dekalb	2,967	142	3,109	1,452	931	. . .	931	101	1,995	260	2,255	970
18	Delaware	14,893	673	15,566	21,661	1,310	. . .	1,310	100	1,982	. . .	1,982	. .
19	Dubois	2,670	22	2,692	393	2,090	. . .	2,090	233	580	167	747	2,485
20	Elkhart	6,650	175	6,825	13,940	. . .	. . .	. . .	. . .	14,935	2,502	17,437	7,417
21	Fayette	612	26	638	135	. .	. . .	. .	. . .	2,576	376	2,952	692
22	Floyd	13,542	434	13,976	42,585	2,314	25	2,339	. . .	5,825	208	6,033	3,363
23	Fountain	4,806	600	5,406	3,318	. . .	. . .	. . .	. . .	2,817	645	3,462	1,635
24	Franklin	2,759	50	2,809	234	. . .	. . .	. . .	. . .	7,708	937	8,645	2,134

25	Fulton	*	*	*	*	*	*	*	*	4,100	800	4,900	2,670
26	Gibson	†	†	†	†	†	†	†	†	6,262	1,066	7,328	3,403
27	Grant	10,969	725	11,694	57,042	442	. . .	442	. . .	9,336	1,368	10,704	2,032
28	Greene	2,100	467	2,567	1,390	964	81	1,045	890	3,336	887	4,223	3,303
29	Hamilton	1,500	200	1,700	6,100	. . .	. . .	. . .	. . .	6,911	2,112	9,023	4,192
30	Hancock	3,939	235	4,174	13,677	132	. . .	132	.	4,288	832	5,120	1,920
31	Harrison	3,750	75	3,825	1,320	2,800	. . .	2,800	120	2,860	288	3,148	1,802
32	Hendricks	†	†	†	†	†	†	†	†	3,124	815	3,939	2,118
33	Henry	7,082	373	7,455	9,800	3,475	50	3,525	1,650	7,315	522	7,837	3,732
34	Howard	10,232	677	10,909	36,540	122	. .	122	200	4,530	773	5,303	2,259
35	Huntington	14,948	1,195	16,143	6,062	653	163	816	45	10,845	1,159	12,004	4,224
36	Jackson	2,956	163	3,119	6,348	628	. .	628	. . . .	1,633	386	2,019	1,506
37	Jasper	1,680	127	1,807	.	. . .	. . .	. . .	. . .	6,279	1,320	7,599	1,260
38	Jay	2,834	70	2,904	543	3,057	268	3,325	4,000	1,073	325	1,398	541
39	Jefferson	6,441	. . .	6,441	2,241	2,241	. . .	2,241	. . .	3,756	417	4,173	2,576
40	Jennings	1,518	25	1,543	525	808	. . .	808	. . .	6,761	667	7,428	2,220
41	Johnson	2,513	126	2,639	3,007	961	76	1,037	207	1,135	90	1,225	474
42	Knox	5,215	432	5,647	.	. .	. .	. .	. .	4,583	68	4 651	2,520
43	Kosciusko	5,594	366	5 960	15,500	1,700	216	1,916	450	6,854	1,088	7,942	1,833
44	Lagrange	2,949	92	3,041	110	2,389	. . .	2,389	. .	2,957	438	3,395	1,487
45	Lake	7,353	585	7,938	3,241	1,471	51	1,522	425	8,732	1,742	10,474	4,141
46	Laporte	51,270	689	51,959	22,026	6,293	270	6,563	105	10,317	1,144	11,461	2,026
47	Lawrence	5,400	800	6,200	33,000	. . .	. . .	. . .	. . .	3,900	1,050	4,950	2,895
48	Madison	18,699	4,040	22,739	48,324	2,814	605	3,419	2,476	7,267	1,397	8,664	1,795
49	Marion	98,500	4,459	102,959	292,966	2,600	13	2,613	.	3,289	721	4,010	2,008
50	Marshall	10,938	446	11,384	7,719	1,690	100	1,790	1,505	1,857	. . .	1,857	1,225
51	Martin	1,141	10	1,151	118	110	10	120	. .	310	50	360	. . .
52	Miami	4,779	535	5,314	207	540	162	702	80	2,438	267	2,705	75
53	Monroe	2,568	. . .	2,568	1,137	417	. . .	417	37	300	. . .	300	. . .
54	Montgomery	7,194	649	7,843	4,122	2,276	208	2,484	852	1,318	90	1,408	390
55	Morgan	3,653	56	3,109	2,125	943	. . .	943	125	4,462	51	4,513	2,184
56	Newton	3,293	457	3,750	. . .	. . .	. . .	. . .	. . .	901	120	1,021	. . .
57	Noble	3,589	206	3,795	6,323	. . .	. . .	. . .	. . .	3,251	355	3,606	1,541
58	Ohio	650	. . .	650	. . .	. . .	. . .	. . .	. . .	361	65	426	430
59	Orange	*	*	*	*	*	*	*	*	915	88	1,003	658
60	Owen	2,938	114	3,052	635	1,825	. . .	1,825	181	1,619	520	2,139	726

*None. †No report.

LIBRARIES AND READING CIRCLES, 1901–1902—Continued.

Number.	COUNTIES.	Town and City Libraries.				Township Libraries.				Young People's Reading Circles.			
		Number Volumes in Town and City Libraries.	Number Volumes Added During Year.	Total.	Volumes Taken Out During Year.	Number Volumes in Libraries.	Number Volumes Added.	Total.	Number Volumes Taken Out During Year.	Number Volumes in Libraries.	Number Volumes Added.	Total.	Number Members Y. P. R. C.
61	Parke	2,682	146	2,828	1,837	1,122	. . . . .	1,122	17	6,998	1,492	8,490	1,673
62	Perry	1,292	95	1,387	. . .	. . . . .	. . . . .	. . . . .	. . .	3,299	494	3,793	3,295
63	Pike	943	51	994	93	475	. . . . .	475	. . . . .	2,070	505	2,575	2,220
64	Porter	5,300	248	5,548	2,239	1,976	48	2,024	739	4,478	645	5,123	1,227
65	Posey	19,213	200	19,413	2,863	4,813	200	5,013	763	7,792	1,693	9,485	4,020
66	Pulaski	1,541	250	1,791	2,408	770	205	975	205	4,492	858	5,350	1,091
67	Putnam	8,170	171	8,341	19,944	632	. . . . .	632	. . . . .	3,891	340	4,231	1,200
68	Randolph	2,476	287	2,763	205	. . .	. . . . .	. . .	. . .	6,305	897	7,202	4,767
69	Ripley	2,264	207	2,471	574	1,472	. .	1,472	. .	5,838	830	6,668	2,413
70	Rush	4,917	603	5,520	5,196	1,903	335	2,238	1,151	585	281	866	1,472
71	Scott	150	. . .	150	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	868
72	Shelby	5,406	360	5,766	13,350	424	58	482	. . . . .	277	642	919	481
73	Spencer	1,331	74	1,405	787	314	. . . .	314	. . . . .	1,182	328	1,510	1,465
74	Starke	400	150	550	250	. . . . .	. . . . .	. . . . .	. . . . .	6,802	596	7,398	1,567
75	St. Joseph	12,632	1,272	13,904	40,728	. . . . .	. . . . .	. . . . .	. . . . .	14,473	1,346	15,819	1,520
76	Steuben	2,620	5	2,625	2,328	2,145	. . . . .	2,145	1,360	3,333	549	3,882	2,005
77	Sullivan	2,445	462	2,907	2,907	1,720	333	2,053	. . . . .	3,868	1,151	5,019	3,922
78	Switzerland	525	25	550	125	. . . . .	. . . . .	. . . . .	. . . . .	1,100	101	1,201	395
79	Tippecanoe	18,350	569	18,899	75,000	. . . . .	. . . . .	. . . . .	. . . . .	19,202	2,458	21,660	2,013
80	Tipton	2,253	1,030	3,283	. . .	. . . . .	. . . . .	. . . . .	. . . . .	2,385	479	2,864	837
81	Union	2,403	230	2,633	2,949	1,329	. . . .	1,329	. . . . .	2,119	386	2,505	950
82	Vanderburgh	28,000	668	28,668	68,000	2,688	80	2,768	. . . . .	512	192	704	375
83	Vermillion	1,145	212	1,357	700	. . . . .	. . .	. . .	. . . . .	1,069	861	1,930	1,598
84	Vigo	19,328	853	20,181	61,981	200	. . . . .	200	. . . . .	2,300	420	2,720	1,150

85	Wabash	6,296	582	6,878	18,972	1,400	....	1,400	600	7,476	633	8,109	4,241
86	Warren	850	25	875	300	100	.....	100	...	3,584	727	4,311	1,230
87	Warrick	975	120	1,095	750	325	...	325	750	3,772	647	4,419	1,150
88	Washington	1,540	231	1,771	..	637	.....	637	....	1,896	55	1,951	835
89	Wayne	33,621	972	34,593	60,438	..	....	..	....	8,011	545	8,556	1,556
90	Wells	9,533	537	10,070	23,958	1,503	....	1,503	...	2,617	410	3,027	751
91	White	1,599	120	1,719	268	...	....	....	....	2,967	936	3,903	1,637
92	Whitley	6,019	117	6,136	2,477	...	.	.	.....	5,182	934	6,116	2,529
	Total	635,401	35,994	671,395	1,383,011	101,668	5,174	106,842	41,080	377,270	58,881	436,151	172,659

NUMBER TOWNSHIP INSTITUTES, AMOUNT PAID TEACHERS FOR ATTENDING SAME, AND AMOUNT PAID TOWNSHIP TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1901-1902.

Number.	COUNTIES.	*a.* Township Institutes.		*b.* Amount Paid Trustees as Above.					
		Number of Township Institutes.	Amount Paid Teachers for Attending Same.	Employing Teachers.	Attending Institutes.	Handling Text-books.	School Book Settlement.	Other Services.	Total.
1	Adams	72	$2,226 50	$40 00	$112 00	$60 00	$79 00	$131 00	$422 00
2	Allen	127	2,914 59	93 00	140 00	82 00	113 00	719 00	1,147 00
3	Bartholomew	86	1,496 88	137 00	145 00	75 00	82 00	691 00	1,130 00
4	Benton	83	1,538 55	141 00	140 00	90 00	80 00	523 00	974 00
5	Blackford	28	780 00	32 00	32 00	. . . .	. . . .	328 00	392 00
6	Boone	75	2,286 24	62 00	84 00	112 00	82 00	729 00	1,069 00
7	Brown	21	827 82	19 00	26 00	53 00	38 00	154 00	290 00
8	Carroll	85	2,073 35	216 00	168 00	224 00	108 00	797 00	1,513 00
9	Cass	86	1,907 03	15 00	25 00	12 00	28 00	114 00	194 00
10	Clark	72	1,547 21	168 00	128 00	168 00	116 00	516 00	1,096 00
11	Clay	79	1,999 00	84 00	38 00	33 00	10 00	292 00	457 00
12	Clinton	94	2,123 00	239 00	211 00	113 00	90 00	775 00	1,428 00
13	Crawford	50	931 00	24 00	58 00	45 00	72 00	334 00	523 00
14	Daviess	61	1,781 15	165 00	106 00	61 00	105 00	887 00	1,324 00
15	Dearborn	70	1,419 39	38 00	38 00	59 95	56 00	146 00	337 95
16	Decatur	61	1,606 05	184 00	93 00	32 00	95 00	1,086 00	1,490 00
17	Dekalb	95	1,462 49	108 00	151 00	72 00	102 00	449 00	882 00
18	Delaware	83	2,748 63	201 00	164 00	. . . .	56 00	1,046 00	1,467 00
19	Dubois	38	707 70	8 00	4 00	85 48	40 00	231 16	368 64
20	Elkhart	106	2,616 48	171 00	212 00	40 00	15 00	567 00	1,005 00
21	Fayette	62	765 85	176 00	76 00	108 00	60 00	535 50	955 50
22	Floyd	31	542 15	78 00	48 00	134 00	32 00	112 00	404 00
23	Fountain	75	1,678 09	264 00	134 00	241 00	84 00	383 00	1,106 00
24	Franklin	85	1,344 75	62 00	125 00	55 00	108 00	500 00	850 00

25	Fulton	52	1,513 57	144 00	110 00	160 00	120 00	528 00	1,062 00
26	Gibson	60	3,067 11	106 00	124 00	138 00	97 00	394 00	859 00
27	Grant	91	2,511 40	26 00	182 00	. . . .	66 00	130 00	404 00
28	Greene	91	2,217 94	170 00	130 00	76 00	82 00	283 00	745 00
29	Hamilton	56	2,346 00	90 00	126 00	45 00	72 00	450 00	783 00
30	Hancock	57	1,626 63	92 00	116 00	116 00	82 00	373 00	779 00
31	Harrison	72	2,065 77	34 00	130 00	80 00	120 00	515 00	879 00
32	Hendricks	80	2,186 90	126 00	152 00	149 00	102 00	957 00	1,486 00
33	Henry	85	1,888 08	327 00	150 00	141 00	153 00	589 00	1,360 00
34	Howard	68	1,599 16	54 00	100 00	56 00	50 00	356 00	616 00
35	Huntington	75	2,163 00	57 00	150 00	35 00	94 00	600 00	936 00
36	Jackson	65	1,579 28	160 00	116 00	171 00	130 00	559 00	1,136 00
37	Jasper	82	1,494 81	56 00	127 00	47 00	. . . .	379 00	609 00
38	Jay	79	1,727 62	82 00	144 00	108 00	68 00	617 00	1,019 00
39	Jefferson	58	1,475 26	111 00	106 00	50 00	148 00	485 00	900 00
40	Jennings	63	1,997 81	170 00	98 00	210 00	68 00	716 00	1,262 00
41	Johnson	58	1,487 61	134 00	90 00	66 60	48 00	706 00	1,044 00
42	Knox	62	2,468 00	255 00	130 00	216 00	101 00	727 00	1,429 00
43	Kosciusko	114	3,098 14	79 00	214 00	117 37	65 00	669 00	1,144 37
44	Lagrange	74	1,656 00	150 00	140 00	75 00	84 00	462 00	911 00
45	Lake	92	2,456 00	*	*	*	*	*	*
46	Laporte	151	2,175 64	170 00	157 00	28 00	68 00	901 00	1,324 00
47	Lawrence	60	1,641 17	44 00	90 00	50 00	80 00	205 00	469 00
48	Madison	94	2,714 77	86 00	103 00	21 35	29 00	2,135 00	2,374 35
49	Marion	63	2,963 93	439 00	158 00	129 00	79 00	1,954 00	2,759 00
50	Marshall	60	1,941 25	82 00	100 00	12 00	4 00	477 00	675 00
51	Martin	40	836 10	24 00	33 00	34 83	18 00	124 00	229 83
52	Miami	91	2,568 00	254 75	177 00	104 00	100 00	581 00	1,216 75
53	Monroe	81	1,360 08	98 00	84 00	63 00	77 00	230 00	552 00
54	Montgomery	68	2,620 00	255 00	131 00	60 00	88 00	156 00	690 00
55	Morgan	91	1,814 00	92 00	168 00	103 00	104 00	196 00	663 00
56	Newton	64	1,286 11	108 00	73 00	30 00	16 00	450 00	677 00
57	Noble	82	1,740 78	90 00	112 00	51 50	74 00	201 00	528 50
58	Ohio	26	376 21	24 00	12 00	26 00	28 00	30 00	120 00
59	Orange	54	1,218 00	96 00	93 00	54 00	70 00	272 00	585 00
60	Owen	63	1,060 00	42 00	102 00	12 00	48 00	485 00	689 00

*None.

NUMBER TOWNSHIP INSTITUTES, AMOUNT PAID TEACHERS FOR ATTENDING SAME, AND AMOUNT PAID TOWNSHIP TRUSTEES FOR MANAGING EDUCATIONAL WORK, 1901-1902—Continued.

Number.	COUNTIES.	*a.* Township Institutes.		*b.* Amount Paid Trustees as Above.					
		Number of Township Institutes.	Amount Paid Teachers for Attending Same.	Employing Teachers.	Attending Institutes.	Handling Text-books.	School Book Settlement.	Other Services.	Total.
61	Parke	87	$2,147 30	$258 00	$154 00	$111 00	$124 00	$1,027 00	$1,674 00
62	Perry	29	968 34	20 00	28 00	27 00	24 00	137 00	236 00
63	Pike	42	1,210 13	38 00	58 00	140 00	76 00	538 00	850 00
64	Porter	100	1,966 34	18 00	78 00	5 00	8 00	158 00	267 00
65	Posey	65	2,262 76	178 00	118 00	124 00	16 00	. . . . .	436 00
66	Pulaski	72	1,372 52	72 00	134 00	172 00	40 00	397 00	815 00
67	Putnam	87	1,858 62	36 00	124 60	60 60	92 00	1,027 00	1,939 00
68	Randolph	73	1,987 51	98 00	164 00	. . . . .	. . . . .	1,072 00	1,334 00
69	Ripley	77	1,632 83	227 00	117 00	205 00	132 00	398 00	1,079 00
70	Rush	90	2,074 98	174 00	130 00	167 00	102 00	575 30	1,148 30
71	Scott	20	463 25	84 00	42 00	210 00	72 00	113 00	521 00
72	Shelby	90	2,230 10	221 00	154 00	92 00	90 00	962 00	1,518 00
73	Spencer	53	1,732 00	134 00	86 60	97 00	30 00	266 00	613 00
74	Starke	63	1,754 97	20 00	106 60	55 00	55 00	. . . . .	236 00
75	St. Joseph	100	2,054 08	285 00	172 00	120 00	85 00	236 00	898 00
76	Steuben	51	905 26	125 00	91 00	40 00	88 00	339 35	683 35
77	Sullivan	61	1,980 42	250 00	118 00	123 00	106 00	692 00	1,289 00
78	Switzerland	34	823 00	74 00	44 00	47 00	36 00	113 00	314 00
79	Tippecanoe	81	2,391 50	520 00	240 00	90 00	180 00	1,010 00	2,040 00
80	Tipton	40	1,346 46	39 00	76 00	62 00	8 00	315 00	500 00
81	Union	48	810 61	65 00	52 00	30 00	102 00	670 00	819 00
82	Vanderburgh	49	1,180 60	48 00	60 00	54 00	52 00	516 00	730 00
83	Vermillion	38	1,888 72	100 00	90 00	90 00	100 00	125 00	505 00
84	Vigo	78	2,464 11	285 00	104 00	. . . . .	. . . . .	2,186 00	2,575 00

85	Wabash	43	2,604 80	242 00	86 00	40 00	95 00	630 00	1,093 00
86	Warren	77	2,365 00	296 00	128 00	153 00	95 00	552 00	1,224 00
87	Warrick	83	1,677 17	117 00	101 00	235 00	101 00	116 00	670 00
88	Washington	72	1,717 26	72 00	96 00	61 00	76 00	255 00	560 00
89	Wayne	195	1,684 00	210 00	112 00	75 00	112 00	239 00	648 00
90	Wells	57	1,688 07	119 00	84 00		62 00	491 00	755 00
91	White	99	3,056 60	154 00	126 00	107 00	81 00	200 00	668 00
92	Whitley	70	1,894 00	47 00	103 00	8 00	38 00	177 00	373 00
	Total	6,121	$149,602 20	$11,664 75	$10,072 00	$7,590 48	$6,562 00	$46,869 31	$82,758 54

AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, YEAR ENDING JULY 31, 1902.

Number.	COUNTIES.	Towns.	Cities.	Total.
1	Adams	$66 12	$266 33	$332 45
2	Allen	111 66	725 00	836 66
3	Bartholomew	241 00	300 00	541 00
4	Benton	243 50		243 50
5	Blackford		300 00	300 00
6	Boone	120 00	140 00	260 00
7	Brown	10 00		10 00
8	Carroll	102 00	75 00	177 00
9	Cass	75 00	450 00	525 00
10	Clark	600 00	300 00	900 00
11	Clay	386 00	225 00	611 00
12	Clinton	173 00	375 00	548 00
13	Crawford	149 00		149 00
14	Daviess	156 50	175 00	331 50
15	Dearborn	142 50	300 00	442 50
16	Decatur	110 50	150 00	260 50
17	Dekalb	345 00	225 00	570 00
18	Delaware		225 00	225 00
19	Dubois	92 45	139 42	231 87
20	Elkhart	150 00	600 00	750 00
21	Fayette	49 00	150 00	199 00
22	Floyd	58 85	450 00	508 85
23	Fountain		447 00	447 00
24	Franklin	186 00		186 00
25	Fulton	375 00		375 00
26	Gibson	75 00	325 00	400 00
27	Grant	576 00	675 00	1,251 00
28	Greene	205 00	100 71	305 71
29	Hamilton	160 00	180 00	340 00
30	Hancock	75 00	120 00	195 00
31	Harrison	84 50		84 50
32	Hendricks	340 00		340 00
33	Henry	495 58		495 58
34	Howard	15 00	175 00	190 00
35	Huntington	228 00	300 00	528 00
36	Jackson	99 00	300 00	399 00
37	Jasper	60 00	75 00	135 00
38	Jay	128 21	225 00	353 21
39	Jefferson	114 00	600 00	714 00
40	Jennings	25 00	45 00	70 00
41	Johnson	32 00	150 00	182 00
42	Knox		250 00	250 00
43	Kosciusko	195 56	221 00	416 56
44	Lagrange	173 00		173 00
45	Lake	710 00	700 00	1,410 00
46	Laporte	80 00	300 00	380 00
47	Lawrence	75 00	240 00	315 00
48	Madison	341 14	612 53	953 67
49	Marion		10,523 43	10,523 43
50	Marshall	75 00	100 00	175 00
51	Martin	165 00		165 00
52	Miami	146 10	75 00	221 10

AMOUNT PAID TOWN AND CITY TRUSTEES FOR MANAGING EDUCATIONAL WORK, YEAR ENDING JULY 31, 1902—Continued.

Number.	COUNTIES.	Towns.	Cities.	Total.
53	Monroe	$58 00	$100 00	$158 00
54	Montgomery	135 00	325 00	460 00
55	Morgan	109 00	72 00	181 00
56	Newton	256 00		256 00
57	Noble	110 00	240 00	350 00
58	Ohio		120 00	120 00
59	Orange	90 00		90 00
60	Owen	180 00		180 00
61	Parke	343 30		343 30
62	Perry	26 00	220 00	246 00
63	Pike	188 50		188 50
64	Porter		300 00	300 00
65	Posey (None)			
66	Pulaski	254 00		254 00
67	Putnam	179 00	225 00	404 00
68	Randolph	164 00	250 00	414 00
69	Ripley	132 00		132 00
70	Rush	100 00	225 00	325 00
71	Scott	15 00		15 00
72	Shelby	77 00	492 00	569 00
73	Spencer	450 00		450 00
74	Starke	115 00		115 00
75	St. Joseph	141 00	600 00	741 00
76	Steuben	208 00		208 00
77	Sullivan	143 00		143 00
78	Switzerland			
79	Tippecanoe	75 00	450 00	525 00
80	Tipton	30 00	225 00	255 00
81	Union	60 00	75 00	135 00
82	Vanderburgh		1,200 00	1,200 00
83	Vermillion	117 00	25 00	142 00
84	Vigo	25 00	450 00	475 00
85	Wabash	210 00	100 00	310 00
86	Warren	116 00		116 00
87	Warrick	180 00		180 00
88	Washington	155 65		155 65
89	Wayne	340 00	300 00	640 00
90	Wells	275 00		275 00
91	White	201 00		201 00
92	Whitley	57 00	150 00	207 00
	Total	$14,006 62	$28,904 42	$42,911 04

VIII. High Schools.

1. General Statement.
2. Statistics for year ending July 31, 1901.
3. Course of Study for Commissioned High Schools.
   (a) Introduction.
   (b) Outline Course.
   (c) Detailed Course.
   (d) List of Books—Supplementary.
   (e) General References.
4. List of Commissioned High Schools, 1902.
5. Statistics for year ending July 31, 1902.
6. The Professional Training of High School Teachers.
7. Township High Schools.
   (a) Statement Concerning.
   (b) The Law.
   (c) Statistical Information.
   (d) Special Illustrations.

1. General Statement.

Indiana is justly proud of her high school system. She has 704 high schools each employing two teachers or more. Add to this an estimated number employing one teacher each and the grand total will reach about 1,000, or approximately, one high school for each township. We have high schools accessible to nearly every child in Indiana.

The law makes it necessary for every school officer to provide high school facilities at home or in lieu thereof to transfer eligible pupils at public expense to corporations maintaining them.

The following is a summary of high school statistics:

HIGH SCHOOL STATISTICAL SUMMARY.
1902.

1.	Number of Commissioned and Non-Commissioned High Schools in Indiana having two or more teachers....	704
2.	Number of High Schools having one teacher (data not accurate).	
3.	Number of Commissioned High Schools.....	185
4.	Number of graduates (1902) from Non-Commissioned High Schools	1,313
5.	Number of graduates (1902) from Commissioned High Schools	2,750
6.	Number of pupils enrolled in Non-Commissioned High Schools	13,214
7.	Total paid teachers in Non-Commissioned High Schools.	$248,787 21
8.	Total paid during the year for libraries, appliances, stoves, furniture, etc., not including janitors' service.	37,001 42
9.	Total current or annual cost of maintaining Non-Commissioned High Schools	285,788 63
10.	Average cost per pupil in Non-Commissioned High Schools	21 63
11.	Number of pupils enrolled in Commissioned High Schools	23,093
12.	Total paid teachers in Commissioned High Schools.....	$570,803 90
13.	Total paid for appliances, reference books, stoves and furniture in Commissioned High Schools.....	61,465 42
14.	Total current or annual cost of Commissioned High Schools	632,269 32
15.	Average current cost per pupil in Commissioned High Schools	27 38

Fig. 16.

16.	Number of teachers employed in Commissioned High Schools	899
17.	Number of teachers employed in Non-Commissioned High Schools	661
18.	Average yearly wages of teachers in Commissioned High Schools	$632 30
19.	Average yearly wages of teachers in Non-Commissioned High Schools	377 10

From the figures given above it is evident that the State is concerned in a large way with instruction above the common branches. It is important, therefore, that the work be carefully supervised to avoid waste and incompetent instruction.

INSPECTION.

The Legislature should either define a high school or authorize the State Board of Education or the State Department of Public Instruction to do so. This would necessitate an annual inspection of the high schools of the State, not for purposes of interfering with local school notions, but to require that the high school standard, within certain limits, be maintained. This is not an innovation, inasmuch as the State Board of Education already requires an inspection of high schools as a prerequisite to the issuance of a commission and as a condition of the transfer of a commission from a Superintendent to his successor. A legal standard for all high schools and an annual inspection of commissioned high schools are the two great necessities in connection with secondary education in Indiana. The attention of the General Assembly is respectfully called to the advisability of authorizing the State Board of Education to appoint a high school inspector, and to assume general supervisory control of all of the high schools of the State—commissioned and non-commissioned. The annual appropriations for this work would not need to be great. A salary of $3,000, and a traveling fund necessary to meet all requirements, would cover the expense.

2. High School Statistics, 1901.

NUMBER OF HIGH SCHOOLS AND HIGH SCHOOL GRADUATES.

Number.	COUNTIES.	Number of Township, Town or City High Schools, Including All Schools, Commissioned or Noncommissioned, of Two or More Teachers Doing High School Work. (Does Not Include Small High Schools of One Teacher.)	Number of Township, Town and City High Schools—Commissioned.	Number of Graduates from Common Branches. (Does Not Include Regular Promotions Without County Diploma.)	Number of Graduates from Township, Town and City Noncommissioned High Schools.	Number of Graduates from All Commissioned High Schools.
1	Adams	12	2	52	. . . .	8
2	Allen	7	2	217	92	36
3	Bartholomew	7	1	128	20	32
4	Benton	10	3	108	12	28
5	Blackford	4	2	39	. . . .	9
6	Boone	5	3	154	4	46
7	Brown	. . . .	. . . .	32	. . . .	. . . .
8	Carroll	12	1	195	26	20
9	Cass	10	1	154	5	28
10	Clark	6	2	91	3	22
11	Clay	. . . .	1	185	. . . .	16
12	Clinton	7	2	89	19	42
13	Crawford	4	. . . .	59	14	. . . .
14	Daviess	9	1	158	1	22
15	Dearborn	4	2	45	16	21
16	Decatur	11	1	106	8	16
17	Dekalb	8	4	66	. . . .	40
18	Delaware	14	2	221	23	34
19	Dubois	5	2	45	5	12
20	Elkhart	4	3	264	25	70
21	Fayette	9	1	54	16	15
22	Floyd	4	1	178	6	31
23	Fountain	12	3	124	9	29
24	Franklin	6	1	45	10	. . . .
25	Fulton	8	2	136	7	18
26	Gibson	14	2	121	26	19
27	Grant	10	5	349	. . . .	68
28	Greene	3	3	86	2	30
29	Hamilton	13	4	361	16	65
30	Hancock	14	3	178	40	44
31	Harrison	8	1	91	. . . .	9
32	Hendricks	13	1	132	46	9
33	Henry	13	3	170	25	31
34	Howard	11	2	201	6	41
35	Huntington	5	4	216	20	31
36	Jackson	10	1	76	10	26
37	Jasper	2	2	75	. . . .	34
38	Jay	9	4	149	4	38
39	Jefferson	8	2	109	11	15
40	Jennings	8	1	94	15	9
41	Johnson	10	3	182	21	23
42	Knox	9	1	80	15	10
43	Kosciusko	14	1	256	33	18
44	Lagrange	13	3	99	28	35

NUMBER OF HIGH SCHOOLS AND HIGH SCHOOL GRADUATES—
Continued.

Number.	COUNTIES.	Number of Township, Town or City High Schools, Including All Schools, Commissioned or Noncommissioned, of Two or More Teachers Doing High School Work. (Does Not Include Small High Schools of One Teacher.)	Number of Township, Town and City High Schools—Commissioned.	Number of Graduates from Common Branches. (Does Not Include Regular Promotions Without County Diploma.)	Number of Graduates from Township, Town and City Noncommissioned High Schools.	Number of Graduates from All Commissioned High Schools.
45	Lake	8	5	182	11	42
46	Laporte	10	2	246	18	52
47	Lawrence	6	2	67	1	21
48	Madison	8	6	320	19	101
49	Marion	13	5	664	36	246
50	Marshall	8	2	172	33	29
51	Martin	1	1	31	. . . .	7
52	Miami	15	4	260	6	50
53	Monroe	2	1	96	. . . .	40
54	Montgomery	18	1	205	34	28
55	Morgan	9	2	257	16	25
56	Newton	5	2	71	3	20
57	Noble	9	3	87	26	28
58	Ohio	1	1	9	. . .	13
59	Orange	2	4	37	1	10
60	Owen	5	2	45	14	13
61	Parke	5	1	103	18	. . . . .
62	Perry	5	. . .	59	. . . .	. . .
63	Pike	14	1	21	. . . .	16
64	Porter	6	3	79	9	20
65	Posey	4	2	102	21	19
66	Pulaski	6	1	123	7	4
67	Putnam	19	1	182	25	21
68	Randolph	11	2	119	15	35
69	Ripley	6	. . . .	48	19	. . . .
70	Rush	12	2	93	49	11
71	Scott	4	. . . .	62	3	. . . . .
72	Shelby	19	1	115	6	9
73	Spencer	1	1	62	1	12
74	Starke	3	2	69	. . .	4
75	St. Joseph	8	2	243	45	33
76	Steuben	10	1	74	27	11
77	Sullivan	9	1	57	13	14
78	Switzerland	2	1	26	4	14
79	Tippecanoe	17	2	320	58	46
80	Tipton	4	2	66	4	17
81	Union	5	2	49	9	29
82	Vanderburgh	22	2	329	. . . .	108
83	Vermillion	8	4	72	. . .	10
84	Vigo	2	1	390	. . . .	50
85	Wabash	8	6	263	14	75
86	Warren	4	1	77	5	6
87	Warrick	7	2	37	2	9
88	Washington	1	1	124	1	22
89	Wayne	13	5	354	38	85
90	Wells	4	1	67	19	14
91	White	9	3	112	10	30
92	Whitley	8	2	138	6	13
	Total	741	188	12,754	1,285	2,621

COST IN NONCOMMISSIONED HIGH SCHOOLS.

Number.	COUNTIES.	Number of Pupils Enrolled in Township, Town or City Noncommissioned High Schools.	Total Amount Paid Teachers in Noncommissioned High Schools, Township, Town or City. [This Includes the Superintendent's Wages if he Teaches.]	Total Amount Paid for Apparatus, Books, Furniture, Stoves and Other Appliances for Township, Town or City Noncommissioned High Schools. [Not Including Janitor's Fees.]	Total Current Cost of Maintaining all Noncommissioned High Schools in Township, Town or City.	Average Cost per Pupil for Education in Noncommissioned Township, Town or City High School.
1	Adams	12	$320 00	. . .	$320 00	$26 66
2	Allen	152	2,739 00	$128 81	2,867 81	23 40
3	Bartholomew	149	2,666 00	93 00	2,759 00	18 00
4	Benton	134	3,352 00	185 00	3,537 00	26 39
5	Blackford	40	715 00	75 00	790 00	20 00
6	Boone	35	738 00	. . .	738 00	21 08
7	Brown (None)	. . .	. . .	. . .	. . .	. . .
8	Carroll	253	5,645 00	523 00	6,168 00	24 00
9	Cass	168	2,963 00	904 50	3,867 50	23 00
10	Clark	177	2,085 00	370 00	2,455 00	17 47
11	Clay	121	1,919 00	88 00	2,007 00	19 60
12	Clinton	277	3,964 00	539 00	4,503 00	16 25
13	Crawford	129	1,848 00	175 00	2,023 00	15 12
14	Daviess	163	2,814 00	200 00	3,014 00	18 49
15	Dearborn	19	950 00	197 68	1,147 68	60 40
16	Decatur	109	5,020 70	57 00	5,077 70	20 07
17	Dekalb	93	2,084 00	179 77	2,263 77	25 35
18	Delaware	189	3,922 00	152 00	4,074 00	21 55
19	Dubois	91	1,356 40	23 00	1,379 40	27 34
20	Elkhart	126	2,825 00	643 00	2,968 00	26 00
21	Fayette	143	3,518 00	712 85	4,230 85	30 21
22	Floyd	69	1,650 00	252 00	1,902 00	27 27
23	Fountain	170	3,056 50	485 00	3,541 50	23 24
24	Franklin	65	1,900 00	. . .	1,900 00	20 60
25	Fulton	82	7,479 55	1,018 13	8,497 68	29 43
26	Gibson	341	6,156 84	1,479 05	7,635 89	22 00
27	Grant	129	1,064 00	142 00	1,206 00	24 00
28	Greene	170	2,690 00	426 88	3,116 88	19 60
29	Hamilton	213	4,442 00	925 00	5,367 00	21 96
30	Hancock	192	3,056 00	82 47	3,138 47	16 39
31	Harrison (None)	. . .	. . .	. . .	. . .	. . .
32	Hendricks	249	4,121 00	605 00	4,726 00	18 98
33	Henry	783	9,027 75	639 00	9,666 75	21 48
34	Howard	140	2,501 50	382 38	2,883 88	19 55
35	Huntington	286	6,150 00	1,255 00	7,405 00	24 50
36	Jackson	255	4,115 50	1,105 33	5,220 83	20 47
37	Jasper (None)	. . .	. . .	. . .	. . .	. . .
38	Jay	64	1,292 00	70 00	1,362 00	21 30
39	Jefferson	132	1,785 00	119 00	1,904 00	14 42
40	Jennings	148	2,665 85	288 90	2,954 75	19 96
41	Johnson	168	3,528 56	377 33	3,905 89	28 96
42	Knox	285	3,822 00	823 00	4,645 00	17 51
43	Kosciusko	259	6,752 00	726 00	7,478 00	28 40
44	Lagrange	151	3,241 50	741 77	3,983 27	26 84
45	Lake	143	6,185 00	565 00	6,750 00	47 20
46	Laporte	334	6,796 00	866 53	7,662 53	25 85
47	Lawrence	30	635 00	95 00	730 00	26 37
48	Madison	463	3,917 00	1,095 05	5,012 05	10 45

COST IN NONCOMMISSIONED HIGH SCHOOLS—Continued.

Number.	COUNTIES.	Number of Pupils Enrolled in Township, Town or City Noncommissioned High Schools.	Total Amount Paid Teachers in Noncommissioned High Schools, Township, Town or City. [This Includes the Superintendent's Wages if he Teaches.]	Total Amount Paid for Apparatus, Books, Furniture, Stoves and Other Appliances for Township, Town or City Noncommissioned High Schools. [Not Including Janitor's Fees.]	Total Current Cost of Maintaining all Noncommissioned High Schools in Township, Town or City.	Average Cost per Pupil for Education in Noncommissioned Township, Town or City High School.
49	Marion	244	$6,707 00	$995 00	$7,702 00	$34 00
50	Marshall	245	4,082 00	231 00	4,313 00	18 00
51	Martin	169	632 00	80 00	712 00	50 00
52	Miami	205	3,447 00	895 00	4,342 00	27 30
53	Monroe	23	480 00	170 00	650 00	28 00
54	Montgomery	299	5,346 33	157 14	5,503 47	17 72
55	Morgan	216	3,820 00	226 00	4,046 00	18 73
56	Newton	83	4,707 00	1,737 00	6,444 00	23 60
57	Noble	121	2,911 50	202 15	3,113 65	25 73
58	Ohio (None)					
59	Orange	45	1,000 00	30 00	1,030 00	23 00
60	Owen	22	360 00		360 00	16 36
61	Parke	86	1,673 20	239 66	1,912 86	21 88
62	Perry	45	550 00		550 00	12 30
63	Pike (Statistics not accurate)					
64	Porter	54	1,358 00	25 00	1,383 00	31 27
65	Posey	313	5,879 50	3,916 61	9,796 11	20 16
66	Pulaski	64	1,482 00	129 00	1,611 00	30 75
67	Putnam	125	1,762 50	401 33	2,163 83	19 30
68	Randolph	99	3,072 00	170 00	3,242 00	18 86
69	Ripley	70	1,515 00	91 80	1,606 80	22 95
70	Rush	288	5,168 75	606 64	5,775 39	18 80
71	Scott	158	1,982 00	80 00	2,062 00	12 54
72	Shelby	306	6,444 25	336 85	6,781 10	17 21
73	Spencer	40	632 00		632 00	33 86
74	Starke	5	125 00		125 00	25 00
75	St. Joseph	136	8,120 00	1,960 25	10,080 25	22 85
76	Steuben	313	4,745 00	158 09	4,903 09	15 66
77	Sullivan	326	3,879 45	634 79	4,514 24	13 84
78	Switzerland	110	970 00	41 00	1,011 00	24 50
79	Tippecanoe	313	6,567 00	759 00	7,326 00	23 40
80	Tipton	120	1,409 00	150 00	1,559 00	13 00
81	Union	61	2,387 50	48 00	2,435 50	49 37
82	Vanderburgh	11	494 00	100 00	594 00	54 00
83	Vermillion (No statistics)					
84	Vigo	33	1,080 00	300 00	1,380 00	41 50
85	Wabash	164	2,745 40	50 02	2,795 42	26 76
86	Warren	60	1,016 00	153 00	1,169 00	37 69
87	Warrick	90	1,750 50	40 00	1,790 50	14 00
88	Washington	150	2,307 75	294 61	2,602 36	17 35
89	Wayne	208	5,487 00	474 00	5,961 00	25 53
90	Wells	98	3,062 00	56 00	3,118 00	31 81
91	White	433	1,901 75	400 43	2,302 18	22 66
92	Whitley	74	2,618 00	513 00	3,131 00	14 50
	Total	13,926	$163,044 03	$138,271 80	$301,315 83	$21 63

COST IN COMMISSIONED HIGH SCHOOLS.

Number.	COUNTIES.	Number Pupils Enrolled in Township, Town or City Commissioned High Schools.	Total Amount Paid Teachers in Commissioned High Schools.	Total Amount Paid for Apparatus, Books, Furniture, Stoves, etc.; Not Including Janitor Fees (Commissioned High Schools).	Total Cost of Maintaining Commissioned High Schools.	Average Cost Per Pupil in Commissioned High Schools.
1	Adams	114	$3,715 00	$181 30	$3,896 30	$34 17
2	Allen	373	12,696 70	487 58	13,184 28	32 27
3	Bartholomew	195	4,816 00	225 00	5,041 00	25 00
4	Benton	222	3,803 00	882 00	4,685 00	21 10
5	Blackford	141	3,953 00	100 00	4,053 00	28 67
6	Boone	314	5,460 00	1,275 00	6,735 00	21 45
7	Brown (None)					
8	Carroll	105	2,700 00	200 00	2,900 00	27 61
9	Cass	317	6,129 00	625 00	6,754 00	21 30
10	Clark	188	4,573 00	551 00	5,124 00	30 15
11	Clay	109	2,050 00	140 00	2,190 00	21 00
12	Clinton	293	6,555 00	1,800 00	8,355 00	28 50
13	Crawford (None)					
14	Daviess	178	4,440 00	350 00	4,790 00	26 91
15	Dearborn	143	4,680 00		4,680 00	32 72
16	Decatur	142	3,060 00	75 00	3,135 00	22 07
17	Dekalb	243	7,395 00	667 00	8,062 00	38 75
18	Delaware	436	9,932 50	629 30	10,561 80	24 22
19	Dubois	88	2,523 25	67 25	2,590 50	29 42
20	Elkhart	563	11,960 00	805 00	12,765 00	22 67
21	Fayette	118	2,590 00		2,590 00	21 95
22	Floyd	218	4,590 00	350 00	4,940 00	23 35
23	Fountain	293	7,284 00	1,791 00	9,075 00	30 97
24	Franklin	66	1,600 00		1,600 00	32 00
25	Fulton	113	3,295 25	343 00	3,638 25	32 20
26	Gibson	201	4,552 00	815 00	5,367 00	26 70
27	Grant	640	12,966 00	1,507 00	14,473 00	22 61
28	Greene	183	2,675 00	295 00	2,970 00	16 22
29	Hamilton	398	5,900 00	740 09	6,640 00	16 68
30	Hancock	265	4,988 75	94 00	5,082 75	21 21
31	Harrison	43	760 00	85 00	845 00	19 65
32	Hendricks	60	1,530 00	211 00	1,741 00	29 02
33	Henry	276	7,041 00	350 00	7,391 00	26 77
34	Howard	407	7,284 00	555 89	7,839 89	19 26
35	Huntington	331	8,319 00	682 00	9,001 00	27 19
36	Jackson	222	4,600 00	1,128 00	5,728 00	25 80
37	Jasper	167	4,595 00	470 00	5,065 00	30 32
38	Jay	290	6,997 00	706 00	7,703 00	26 56
39	Jefferson	157	4,360 00	1,800 00	6,160 00	39 23
40	Jennings	90	1,800 00		1,800 00	20 00
41	Johnson	293	5,545 45	177 23	5,722 68	19 53
42	Knox	183	3,800 00	500 00	4,300 00	23 50
43	Kosciusko	122	2,560 00	100 00	2,660 00	22 00
44	Lagrange	217	4,353 50	1,407 33	5,760 83	26 55
45	Lake	322	8,784 00	2,201 00	10,985 00	34 12
46	Laporte	319	9,812 50	250 00	10,062 50	27 01
47	Lawrence	185	3,555 00	275 00	3,830 00	20 40
48	Madison	907	14,752 38	1,775 00	16,527 38	18 22

COST IN COMMISSIONED HIGH SCHOOLS—Continued.

Number.	COUNTIES.	Number Pupils Enrolled in Township, Town or City Commissioned High Schools.	Total Amount Paid Teachers in Commissioned High Schools.	Total Amount Paid for Apparatus, Books, Furniture, Stoves, etc., Not Including Janitor Fees (Commissioned High Schools).	Total Cost of Maintaining Commissioned High Schools.	Average Cost Per Pupil in Commissioned High Schools.
49	Marion	2,747	$80,546 00	$4,970 00	$85,516 00	$32 13
50	Marshall	97	2,910 00	225 00	3,135 00	32 32
51	Martin	29	622 00	64 28	686 28	23 66
52	Miami	413	7,552 00	1,089 00	8,641 00	20 92
53	Monroe	242	4,200 00	800 00	5,000 00	28 92
54	Montgomery	249	4,900 00	200 00	5,100 00	20 47
55	Morgan	194	3,500 00	655 00	4,155 00	21 42
56	Newton	115	3,275 00	144 51	3,419 51	29 73
57	Noble	230	5,315 00	742 55	6,057 55	26 33
58	Ohio	67	1,440 00		1,440 00	21 47
59	Orange	52	1,000 00	37 50	1,037 50	19 95
60	Owen	127	2,240 00	389 00	2,629 00	20 70
61	Parke	82	1,590 00	156 45	1,746 45	21 30
62	Perry	25	1,500 00		1,500 00	60 00
63	Pike	80	1,580 00	100 00	1,680 00	21 00
64	Porter	234	6,415 00	800 00	7,215 00	30 83
65	Posey	123	3,875 00	387 00	4,262 00	34 65
66	Pulaski	71	940 00	10 00	950 00	13 38
67	Putnam	129	3,425 00	144 18	3,569 18	28 55
68	Randolph	197	4,939 00	726 00	5,665 00	21 65
69	Ripley (None)					
70	Rush	190	3,940 00	350 00	4,290 00	22 66
71	Scott (None)					
72	Shelby	190	3,770 00	100 00	3,870 00	24 19
73	Spencer	83	2,137 00	47 50	2,184 50	26 31
74	Starke	76	1,555 00	100 00	1,655 00	21 77
75	St Joseph	427	11,495 00	1,980 67	13,475 67	30 49
76	Steuben	90	1,242 50	180 00	1,422 50	15 85
77	Sullivan	117	1,965 00	300 00	2,265 00	19 36
78	Switzerland	69	1,312 00	263 00	1,575 00	22 48
79	Tippecanoe	474	10,570 00	75 00	10,645 00	22 45
80	Tipton	134	3,205 00	470 00	3,675 00	27 42
81	Union	135	2,705 88	649 83	3,355 71	21 97
82	Vanderburgh	771	21,594 00	218 39	21,812 39	28 29
83	Vermillion (No report)					
84	Vigo	666	18,560 00	1,430 00	19,990 00	30 00
85	Wabash	678	11,120 00	537 85	11,657 85	18 81
86	Warren	58	1,880 00		1,880 00	32 41
87	Warrick	59	1,095 25	115 00	1,210 25	20 51
88	Washington	93	1,870 00	97 00	1,967 00	21 15
89	Wayne	564	14,387 00	806 00	15,193 00	26 93
90	Wells	149	2,815 00	600 00	3,415 00	22 92
91	White	204	5,600 00	60 00	5,660 00	27 74
92	Whitley	133	2,623 00	125 00	2,748 00	20 66
	Total	22,213	$518,536 91	$47,814 59	$566,351 50	$25 48

WAGES OF TEACHERS IN HIGH SCHOOLS.

Number.	COUNTIES.	Number of Teachers Employed in Commissioned High Schools.	Number of Teachers Employed in Non-commissioned High Schools.	Average Yearly Wages of Teachers in Commissioned High Schools.	Average Yearly Wages of Teachers in Non-commissioned High Schools.
1	Adams	6	1	$619 16	$320 00
2	Allen	16	7	793 54	391 28
3	Bartholomew	6	7	803 16	380 86
4	Benton	9	7	422 55	478 86
5	Blackford	7	2	564 71	357 50
6	Boone	9	2	606 66	369 00
7	Brown				
8	Carroll	4	16	675 00	352 81
9	Cass	9	11	681 00	269 33
10	Clay	9	6	508 11	347 50
11	Clark	3		683 33	
12	Clinton	9	9	728 33	440 44
13	Crawford		5		369 60
14	Daviess	6	9	740 00	312 66
15	Dearborn	7	2	668 71	573 84
16	Decatur	4	10	745 00	502 07
17	Dekalb	11	3	672 27	694 66
18	Delaware	16	10	620 75	392 20
19	Dubois	6	3	420 50	452 13
20	Elkhart	20	3	598 00	775 00
21	Fayette	3	8	863 33	439 75
22	Floyd	6	4	765 00	412 50
23	Fountain	17	12	428 47	254 70
24	Franklin	3	6	533 33	333 33
25	Fulton	8	7	412 00	378 57
26	Gibson	8	12	569 00	513 07
27	Grant	25	5	2,158 00	431 60
28	Greene	7	6	382 14	448 33
29	Hamilton	14	11	421 42	403 83
30	Hancock	9	8	554 30	382 00
31	Harrison	2		380 00	
32	Hendricks	4	15	382 50	274 66
33	Henry	12	15	586 75	601 85
34	Howard	12	10	607 00	250 15
35	Huntington	14	13	594 21	473 07
36	Jackson	8	11	575 00	374 13
37	Jasper	8		574 37	
38	Jay	12½	5	559 76	258 40
39	Jefferson	7	6	622 85	297 50
40	Jennings	3	8	600 00	333 23
41	Johnson	10	8	554 54	441 07
42	Knox	5	8	760 00	477 75
43	Kosciusko	4	28	640 00	241 15
44	Lagrange	10	12	435 35	270 08
45	Lake	16	10	549 00	618 50
46	Laporte	15	10	654 16	679 60
47	Lawrence	7	4	507 86	158 75
48	Madison	36	7	409 78	449 14

WAGES OF TEACHERS IN HIGH SCHOOLS—Continued.

Number.	COUNTIES.	Number of Teachers Employed in Commissioned High Schools.	Number of Teachers Employed in Non-commissioned High Schools.	Average Yearly Wages of Teachers in Commissioned High Schools.	Average Yearly Wages of Teachers in Noncommissioned High Schools.
49	Marion	96	13	839 02	516 00
50	Marshall	4	10	717 50	408 20
51	Martin	2	1	525 35	632 00
52	Miami	14	12	682 28	287 25
53	Monroe	7	1	600 00	480 00
54	Montgomery	9	20	544 44	267 31
55	Morgan	7	11	500 00	347 28
56	Newton	6	3	545 83	583 33
57	Noble	9	6	590 55	485 25
58	Ohio	3	. . . . .	480 00	. . . .
59	Orange	3	2	333 33	500 00
60	Owen	5	5	448 00	298 89
61	Parke	3	6	530 00	278 86
62	Perry	3	3	500 00	183 33
63	Pike	3	13	526 66	294 53
64	Porter	11	4	583 18	339 50
65	Posey	8	4	484 00	538 00
66	Pulaski	3	9	313 33	315 42
67	Putnam	6	18	570 83	. .
68	Randolph	8	9	617 37	341 33
69	Ripley	. . . .	6	. . . .	252 50
70	Rush	8	10	492 50	516 87
71	Scott	. . . . .	6	. . . .	330 66
72	Shelby	5	19	754 00	339 17
73	Spencer	4	2	534 25	316 00
74	Starke	4	1	388 75	425 00
75	St. Joseph	15	7	766 33	418 57
76	Steuben	4	16	310 62	296 50
77	Sullivan	4	9	491 25	431 05
78	Switzerland	4	6	428 00	161 66
79	Tippecanoe	13	17	813 07	351 00
80	Tipton	6	4	534 16	352 25
81	Union	6	5	450 82	477 50
82	Vanderburgh	21	1	1,028 28	494 00
83	Vermillion (No statistics)	. . . .	. . . . .	. . . .	. . . .
84	Vigo	23	2	806 95	540 00
85	Wabash	22	12	505 45	228 78
86	Warren	9	5	208 88	203 20
87	Warrick	3	8	365 08	218 81
88	Washington	4	7	467 50	329 68
89	Wayne	24	13	590 70	421 30
90	Wells	5	8	563 00	385 50
91	White	10	9	560 00	211 30
92	Whitley	6	7	437 16	374 00
	Total	852	692	$609 17	$350 94

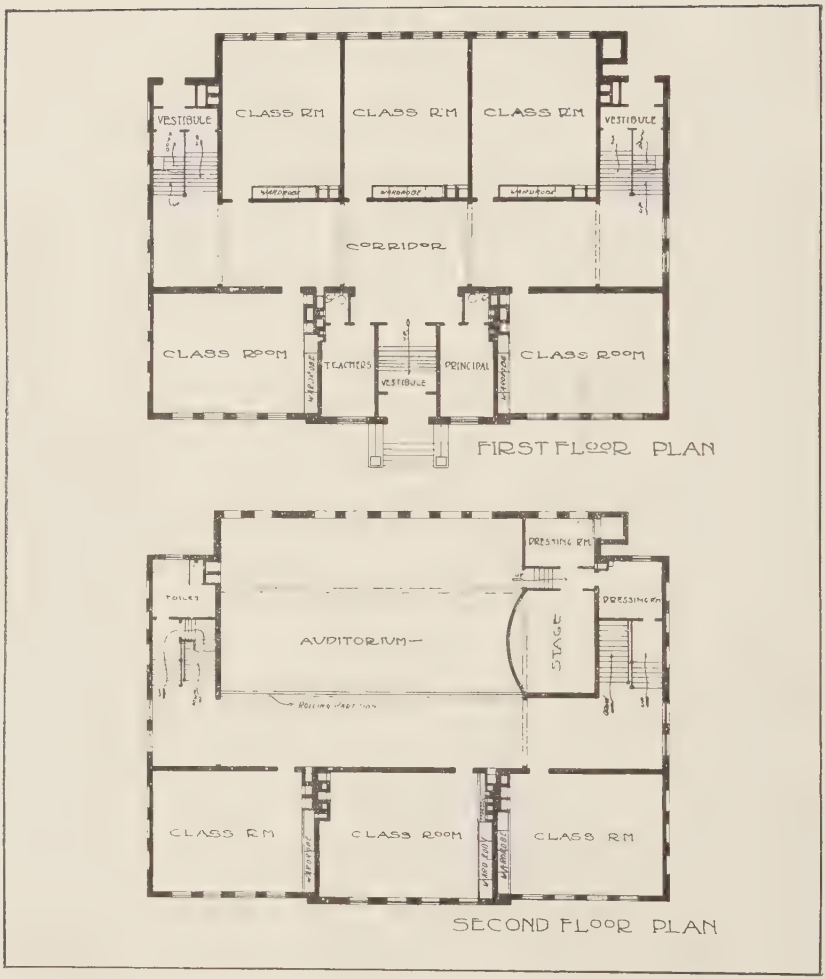

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Fig. 17.

3. Course of Study for Commissioned High Schools.

Adopted July 2, 1902.

(a) INTRODUCTION.

The following course of study for the commissioned high schools of Indiana was adopted by the State Board of Education, July 2, 1902. It is a revision of the course adopted in 1898. It provides for required work as follows:

Three years of Language, three years of History, three years of Mathematics, two years of Science, four years of English, and electives to complete a full course of four years. It is not intended that the course should be an absolute one, but that it should guide local school officers and teachers and form the basis of a minimum course. For example, the option is given in the first year to study either Botany or Zoölogy, or one of four languages. In the third year to pursue the study of England throughout the entire year, or to divide the year between the French and English history; in the fourth year to study either Physics or Chemistry, or both, or to carry throughout the year any one of a number of electives. It is the desire of the Board to have a few subjects contained throughout the entire course rather than a great field of subjects each through a brief period. It would not seem advisable to drop one year of English for the purpose of substituting an elective, nor does it seem advisable to drop one year of History and substitute an elective in a different department. A course of study containing few subjects pursued throughout the entire high school course has many advantages: First, It gives excellent training, scholarship and discipline in a given subject. Second, It makes necessary fewer teachers. Third, It requires a smaller library and equipment. The Board recognizes the fact that a great many students do not continue their education beyond the high school. For that reason, the option is given of substituting Commercial Arithmetic or Bookkeeping for Solid Geometry. It is the intention of the State Board of Education to inspect as many of the commissioned high schools each year as it is possible for them to reach. The points of interest to them are those required of all commissioned high schools, namely: First, The character of the teaching must be satisfactory. Second, The high school course must not be less than thirty-two months in length, continuing from the eighth year. Third, The whole time of at least two teachers must be given to the high school work. Fourth, The pursuing of few subjects throughout the entire

course rather than many covering short periods. Fifth, A library adequate to meet all the demands for reference work and general reading supplementary to the regular text-books. See recommendations in connection with the outlines of the different subjects and reference list on page 675.) Sixth, Laboratories fully equipped to do all of the necessary work in the Sciences pursued in any given high school. Seventh, No Science should be taught for a term of less than one year. Eighth, Admission to the high school must be given only to those who have completed to the entire satisfaction of the school officers and teachers, all of the work of the grades. Ninth. The high school building must be kept in good order, the sanitary appliances adequate, the heating and lighting good, and outhouses and indoor closets clean and sanitary. Tenth, All courses leading to college entrance should provide at least three years of foreign language. (See outline.) Eleventh, Psychology, Sociology and Political Economy should not be taught in high schools. Twelfth, Beginning with the school year 1903 each high school must have in its faculty at least one graduate from an acceptable normal school, college or university. Thirteenth, The course of study must be at least a fair equivalent of the following:

(b.) OUTLINE COURSE.

First Year.	Second Year.	Third Year.	Fourth Year.
(Required.) Algebra.	Algebra, one-half year, and Plane Geometry, one-half year, or Concrete Geometry, one-half year. (Elective.)	Plane Geometry, one-half year, and Solid Geometry, one-half year.	English. American History and Civil Government.
Botany or Zoölogy. English.	English.	English.	Physics or Chemistry. Electives— Physical Geography. Geology.
Language— (a) Latin, (b) German, (c) French or (d) Greek.	History of Greece, one-half year, and History of Rome, one-half year. Language.	History of England, one year, or French and English History, one year (one-half year each). Language.	Commercial Arithmetic. Bookkeeping or Language, one year.

(c) DETAILED COURSE.

SCIENCE.

Systematic instruction in one or more branches of Natural Science is an essential part of the high school curriculum, but it should not be attempted unless a skilled teacher is available and proper facilities for laboratory work can be provided. The chief object of science teaching in the high school is not to impart information or attempt scientific training, but rather to fix the interest of the pupil upon natural phenomena, to develop his powers of observation, and to cultivate the scientific spirit of accuracy and truthfulness.

The choice of subjects to be taught should be made deliberately, for definite reasons and then adhered to; it should not be accidental to the wishes or convenience of teachers whose service may be of a temporary character only. At least one of the teachers in the high school should be employed because of special training and fitness to administer the particular science subjects of the curriculum.

Wherever possible a separate room should be provided for laboratory work, supplied with proper desks or tables and with cases for storing of apparatus. The equipment should be kept clean and in order. It is destructive of a proper estimate of the value of science study if the pupil is not made to respect and value highly all of the equipment and supplies furnished for that purpose. The equipment should be well selected, simple and for use.*

A common mistake in presenting science to high school pupils is the attempt to do too much. In most instances the amount of time, the character of equipment, the capacity of the teacher and the character of the pupil forbid the attempt to do more than teach some of the elementary principles of a science. Scientific theories which are not well established should be avoided and the attention of the pupil directed to a study of objects and phenomena, of causes and results and of relations. Intelligent note-taking and recording of work performed should be cultivated.

Not less than one year's time should be given to any particular branch of science.

BOTANY.

Only certain phases of Botany can be profitably pursued in the high school. It is advised therefore that these be emphasized rather than that the work be extended. Much harm has been done both to science and to the pupil by the attempt to include in the high school course work which can only be given with profit in the college or university.

Plants as living things may obviously be studied in any one of three ways:

Morphology.

The general appearance of plants (form, color, gross anatomy, etc.), and their more evident adaptation to their surroundings, animate and and inanimate, may be observed. At the present time this way of studying plants is the only one which pupils at the average high school, or at many of the commissioned high schools, can profitably attempt. It is known as the General Morphology of Plants. In this course, which should be as much as possible out of doors, the pupil should observe the young as well as the old plants, not merely as individuals, but as parts of the general scheme of nature, noting the conditions of soil, light, moisture and exposure under which they live, and their adaptation to these conditions. For the work of this course either Gray's "Structural Botany" (American Book Co., New York), or Coulter's "Plant Studies" (D. Apple-

*(Members of the Board of Education will be glad to give advice in such matters when requested.)

ton & Co., Chicago), may serve as a guide. These should be supplemented by such works as Karner's "Natural History of Plants" (Henry Holt & Co., New York), or Coulter's "Plant Relations" (D. Appleton & Co., Chicago).

Anatomy.

The constructive elements of plants may be studied, noting not merely the form and the arrangement of the parts, but the fitness of each element, and the suitableness of each arrangement of elements to meet external conditions, largely those of a physical nature, such as mechanical strains, the force of gravitation, etc. Only in the most advanced high schools as yet can pupils profitably undertake the study of the microscopic anatomy of plants and the study of plants which, because of their minute size, must be examined under the microscope to be known at all. Some knowledge of the fundamental principle of physics will be necessary before such a course is attempted, not only that the pupil may understand the instruments with which he works (lenses), but also the mechanical and other principles involved in every plant structure, even the simplest. The State Board of Education distinctly advises against the introduction of microscopic anatomy into the high school course in Botany except when the teacher in charge has been well trained for the work and the apparatus is ample and appropriate. Assuming that the subject is given one-fourth of the pupil's time during one year, the second course may be made to cover the following topics:

1. The typical Plant Cell.—A study of its structure, general composition, contents, form and methods of multiplication.

2. Uncellular Plants.—A study of the general structure and main facts of growth and reproduction of yeasts and protococcus.

3. Multicellular Plants.—Noting the arrangements of cells together, the effect of such groupings on the numbers of the groups, the mechanical, physical and physiological results of such groupings and the modes of reproduction as shown by:

   a. Spirogyra (common pond scum) cladophora, chara or nitella.
   b. Mucor (bread mold).
   c. The rusts and mildews.
   d. A moss.
   e. A fern.
   g. Flowering plants.

The character and scope of desirable work under these various heads is indicated with sufficient accuracy in the various text-books in Botany on the market. Additional books recommended for this course are "Spalding's Introduction to Botany" (D. C. Heath & Co., New York), Atkinson's "Elementary Botany" (Henry Holt & Co., New York), "Botany," L. H. Bailey (The Macmillan Co., New York), Sedgwick & Wilson's "Biology," Goodale's "Physiological Botany" (American Book Co., New York), Arthur, Barnes and Coulter's "Handbook of Plant Dissection" (Henry Holt & Co., New York), Bergen's "Elements of Botany" (Ginn & Co., Chicago), Bower's "A Course of Practical Instruction in Botany" (Macmillan & Co., New York), Strasburger, Schimper, Schenck and Noll's "Lehrbuch der Botanik," English Translation (Macmillan & Co., New

York). The following apparatus would be required for the efficient prosecution of this course: Compound microscopes, one for each pupil during his stay in the laboratory, but by dividing the class into small sections the total number of microscopes need not be large. The Bausch & Lomb Optical Co., Rochester, N. Y., or the Cambridge Botanical Supply Co., Cambridge, Mass. (who will import foreign instruments, duty free, for school), can furnish suitable microscopes from $27 upward in price. Cheaper ones are untrustworthy. In addition will be needed:

Glass slides, about 75 cents per gross.

Cover glasses, 75 cents per ounce.

Razors, $1 to $1.50 each.

Camel's hair brushes (small), 20 cents or more per dozen.

Watch glasses (flat on bottom), 25 cents per dozen.

Dissecting needles (self-made by forcing sewing needles into slender handles).

Fine pointed forceps, 15 cents to 75 cents per pair.

Chemical reagents, such as iodine, glycerine, potassic-hydrate, potassic-iodine, and a few stains such as fuchsin, eosin, saffanin, costing in all about $5.00.

PHYSIOLOGY.

The plant at work may be studied, considering both the nature of the work done and the means by which it is accomplished. The most important facts of plant physiology should be presented by the teacher to classes studying plants in either of the ways already described; but the study of plant physiology itself should not be attempted in the high school, since the conditions necessary for successful experimentation can not ordinarily be provided, and especially since the antecedent training in chemistry and physics essential to a comprehension of the questions involved can not have been given under high school conditions.

ZOÖLOGY.

Assuming that one-fourth of fthe student's time for one year is devoted to the subject, the following scheme may be followed:

Fall and winter, a study of comparative anatomy of a series of animals, beginning with the lower types. In this the organism as a living thing may be considered, and then its parts, noting the division of the body into definite organs and systems for definite functions, and the gradual increase in complexity and efficiency of these organs and systems as the higher types are reached. Detailed outlines for the study of individual forms are to be found in Nos. 1 and 2 of the books mentioned below. The spring may be taken up with a more detailed study of some group of local representatives of animals most familiar to the teacher. In this connection frequent excursions must be taken, and especial attention paid to the variety of species found, the character differing most in the differing species, the peculiar surroundings in which each one lives, the peculiarities that fit each one to its peculiar home; the habits of each species, the coloration of each species as compared with its surroundings, the comparative number of individuals of each species, the difference between individuals of the same species. For this purpose Nos. 6 and 7 of the books given below will be found useful.

All of the books mentioned below should be accessible in the laboratory. Each student should be supplied with 1 or 2.

1. Elementary Biology, Boyer. About $1.00; published by D. C. Heath & Co., Chicago.

2. Elementary Lessons in Zoology, Needham. About $1.25; published by American Book Co., Cincinnati.

3. Elementary Biology, Parker. About $2.50; published by Macmillan & Co., New York.

4. Invertebrate Morphology, MacMurich. About $4.00; published by Henry Holt & Co., Boston.

5. Comparative Anatomy of Vertebrates, Wiederscheim. About $3.50; published by Macmillan & Co., New York.

6. Manual of Insects, Comstock. About $4.00; published by Comstock Publishing Co., Ithaca, N. Y.

7. Manual of Vertebrates, Jordan. $2.50; published by McClurg & Co., Chicago.

8. Colton's Practical Zoölogy. 80 cents; D. C. Heath & Co., Chicago.

9. Holder's Elements of Zoölogy; published by D. Appleton & Co., Chicago.

10. Pratt's Invertebrate Zoölogy; published by Ginn & Co., Boston.

11. Jordan and Kellogg's Animal Life; published by D. Appleton & Co., Chicago.

APPARATUS FOR A CLASS OF TEN.

A well-lighted room with table space of 2½x1½ feet for each student.

Two compound microscopes, at $27.00. Bausch and Lomb, Rochester, N. Y. AAB2.

Five dissecting microscopes, at $5.00. Bausch and Lomb, Rochester, N. Y. Improved Barnes.

One scalpel, one pair small scissors, one pair forceps, one blow pipe, hand lens, mounted needles. Five sets at $1.00. To be had put up in small box form from E. H. Sargent and Co., Chicago, or Bausch and Lomb, Rochester, N. Y.

Alcohol may be purchased for schools at about 50 cents per gallon. Application should be made to some distillery to set aside ten gallons or more for withdrawal, duty free. A bond must be given for twice the amount of the tax of the alcohol to be so withdrawn. Printed instructions may be secured from the nearest collector of internal revenue.

PHYSICS.

It were better that this science be left out of the high school curriculum than to entrust its presentation to a teacher who has not had special training in a physical laboratory. If physics can not be taught well, substitute for it a science that can be. It makes not so much difference what is taught as how it is taught.

Physics is an experimental science, and must be taught largely by experiment. This means that each high school must have a supply of physical apparatus. But the amount that is actually required is much less than is generally supposed. With the aid of the apparatus and sup-

plies mentioned in the appended list, an enthusiastic and skilled teacher will be able to give most of the experiments mentioned in the usual high school text-books on physics:

2 meter sticks (to millimeters and inches), at 25c	$0 50
3 spring balances (24 lbs.) at 15c	45
1 platform balance (beam graduated to 1-10 gm)	5 65
1 set metric weights (2kgm. to 1 gm.)	1 75
1 box metric weights (brass), 100 gm. to 1 cgm	1 50
1 specific gravity balance (upright)	3 00
1 pump (reversible, condensing and exhausting)	3 00
10 feet 3-16-inch rubber tubing (heavy), at 10c	1 00
10 lbs. mercury, at 65c	6 50
10 lbs. glass tubing, soft, assorted sizes, at 50c	5 00
1 Bunsen burner (for gas)	35
2 thermometers, 100 degrees C., etched on stem, at 95c	1 90
2 tuning forks, C & C^1, at $1.50	3 00
1 sonometer	4 00
1 long brass spiral spring—for waves	75
2 flint glass prisms, at 35c	70
1 double convex lens, 4 inches, at $1.25	1 25
1 crystal of Iceland spar	1 25
1 magnetic needle on stand	50
2 bar magnets (about 20 cm. long)	50
1 electro magnet (helix), with removable core	1 50
1 astatic galvanometer	5 00
2 gravity cells (crowfoot), at 50c	1 00
1 grenet cell, 1 qt.	1 75
2 lbs. insulated office wire, No. 18, at 35c	70
1 lb. iron filings	10
1 gold leaf electroscope	75
1 electrophorus	1 50
10 lbs. copper sulphate (commercial), at 5c	50
10 lbs. sulphuric acid (commercial), at 5c	50
1 lb. chromic acid	40
1 rubber (ebonite) rod, 1 cm. diameter	30
1 soldering outfit	75
For supplies (as tumblers, cans, zinc, corks, wire, chemicals, etc.) that can be purchased as needed of local dealers	10 00
Total	$67 30

Suitable texts may be mentioned as follows:

Carhart and Chute's Physics (Allyn & Bacon, publishers).

Gage's Physics (Ginn & Co.).

Appleton's School Physics; Outlines of Physics (Macmillan & Co., publishers, New York).

Thwing's Elementary Physics (B. H. Sanborn & Co., Boston).

The following named are reliable dealers in supplies and apparatus:

W. A. Olmstead, 182 Wabash Ave., Chicago.

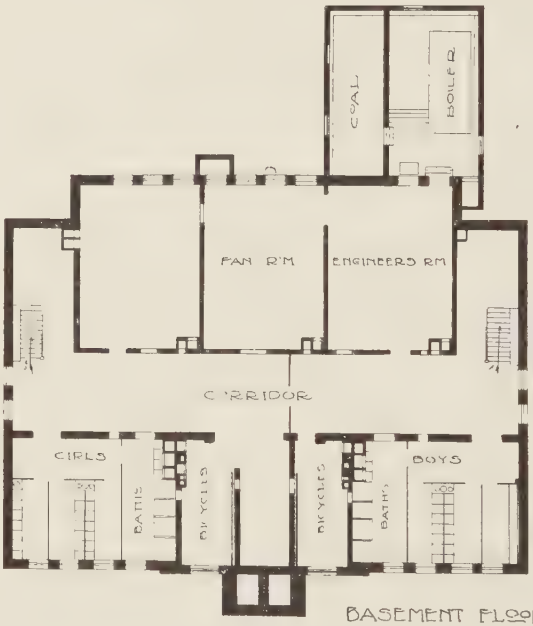

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Fig. 18

Eimer & Amend, 205-211 Third Ave., New York.
Chicago Laboratory Supply and Scale Co., Chicago.
The Columbia School Supply Co., Indianapolis, Ind.

CHEMISTRY.

The study of chemistry, accompanied by individual experimental work by the pupil and demonstrations by the teacher, provides excellent training in observation and a useful knowledge of important natural and industrial processes, as well as in logical thinking. The aim of the course in the high school should be mainly to secure an understanding of fundamental principles and the development of the powers of observation, deduction and expression. The pupil should not be led to think that he is being trained in the practice of analytical chemistry.

The course should include the study of a suitable text accompanied by numerous simple experiments done by the pupil to show the method of preparation and the properties of various substances. These should be supplemented by demonstrations by the teacher if circumstances permit, showing the quantitative relations concerned in some fundamental reactions. The pupil may thus become familiar by observation with the experimental evidence of the more important quantitative laws, and thus realize that our present theories have been deduced from and are not the causes of the facts observed.

With this in view, most of the time commonly devoted to qualitative analysis may well be given to more thorough work in general chemistry. Analytical work, unless under the guidance of a very exceptional teacher, is limited in its instructional value and has little direct application unless supplemented by more advanced study and practice.

The laboratory equipment need not be extensive. Table space is essential for the performance of experiments. Gas and water attachments are not indispensable but desirable. A resourceful instructor will be able to conduct the work of a class without most of the fixtures considered necessary in college and university laboratories. Of course the best equipment is desirable if the school can afford it. The elementary textbooks on chemistry usually contain complete lists and prices of materials and apparatus needed for the course presented. The cost of such outfits will vary from $15 to $50, and since some of this is of permanent character, the subsequent annual cost of maintenance is small.

Not less than one year should be given to the study even in its elementary outline.

The following are some of the more recent texts which seem best adapted to high school work:

Briefer Course in Chemistry. Remson. (Henry Holt & Co.)
Experimental Chemistry. Newell. (D. C. Heath & Co.
Elementary Principles of Chemistry. Young. (Appleton & Co.)

The following are reliable dealers in chemical apparatus and supplies:

E. H. Sargent & Co., Chicago.
Eimer and Amend, New York City.
The Chicago Laboratory and Scale Co., Chicago.
The Columbia School Supply Co., Indianapolis, Ind.

GEOLOGY.

It would be far better for the student and the school not to attempt to teach geology than to give a disconnected and poorly balanced course. In case, however, it is desirable to include this subject, it is recommended that it be taught in connection with the physical geography, which may be elected in the last part of the third year or throughout the fourth year. At least one complete year should be devoted to the course. As far as may be possible, the work of the student should be, in part at least, of an observational nature. The student should be encouraged to reason and draw conclusions from observed facts.

As preparatory to further work, the high school courses in geology may be based upon Tarr's "Elementary Geology," or W. B. Scott's "Introduction to Geology." For the work in physical geography the course may be based upon Tarr's "Physical Geography." For fuller treatment of the topics than can be given in the course frequent reference should be made to the following books:

Dana, Manual of Geology. American Book Co.
Geikie, Class Book of Geology.
Shaler, Story of Our Continent.
Shaler, Sea and Land.
Russel, L. C., Volcanoes of North America.
Geikie, Physical Geography.
LeConte, Elements of Geology. D. Appleton & Co.

MATHEMATICS.

Two courses of study for classes in High School Mathematics are herewith given, either of which covers the amount of Mathematics required of Commissioned High Schools.

It will be seen that they differ but slightly, one introducing the study of Concrete Geometry which the other does not offer, and requiring its study previous to the study of Demonstrative Geometry, thus pushing Demonstrative Geometry one-half year farther along in the course.

The formal study of Demonstrative Geometry immediately following Algebra is known to be extremely difficult for many students, and the study of Concrete Geometry as an introduction to Demonstrative Geometry, thus familiarizing the students with the simpler elements of the subject but particularly with the language of Geometry, has been found by skilled instructors to make the mastery of Demonstrative Geometry much easier by students generally, and its study more thoroughly enjoyed by them.

It is recommended that those students whose school education will end with their graduation from the high school, be permitted to elect some other mathematical subject, say Advanced Arithmetic, Advanced Algebra or Bookkeeping, in the place of Solid Geometry in the fourth year.

1. Algebra.

One and one-half years (at least twelve school months) of daily recitations given to the mastery of the fundamental processes, factoring, fractions, simple and quadratic equations, simple simultaneous equations, powers and roots. (Have omitted logarithms.)

The following named texts, which have been thoroughly tested by competent teachers of Algebra, are recommended for use in high school classes:

1. Taylor's Elements. Allyn & Bacon.
2. Wells' Essentials. D. C. Heath & Co.
3. Wentworth's Revised. Ginn & Co.
4. Fisher and Schwatt. University of Pennsylvania.
5. Beman and Smith. Ginn & Co.
6. Milne-Academic. American Book Co.

2. Concrete Geometry.

One-half year (a minimum period of four school months) of daily recitations to be devoted to the mastery of the "language of geometry" and such of the simpler elements of Geometry as may be illustrated in a concrete way. To be taught orally or with the assistance of some good text.

3. Demonstrative Geometry.

One year (eight school months) of daily recitations in Plane Geometry required of all students, and one-half year (four months) of Solid Geometry required of students who are preparing for entrance to college, but elective with those who will cease going to school at the close of their high school course. Special emphasis to be placed on the working out of practical exercises and the solution of original problems.

The following texts are recommended:

1. Wells' Essentials, Revised. D. C. Heath & Co.
2. Wentworth, Revised. Ginn & Co.
3. Beman and Smith, Revised. Ginn & Co.
4. Philips and Fisher. American Book Co.
5. Milne. American Book Co.
6. Schultze and Sevenoak. The Macmillan Co.

Years.	Course I.	Course II.
First	Algebra.	Algebra.
Second	Algebra, one-half of year. Demonstrative Geometry, one-half of year, Plane.	Algebra, one-half of the year. Concrete Geometry, one-half of year.
Third	Demonstrative Geometry — Plane, one-half of year. Demonstrative Geometry — Solid, one-half of year.	Demonstrative Geometry — Plane, entire year.
Fourth	Elective.	Demonstrative Geometry — Solid, first half of year. Elective, second half of year.

FOREIGN LANGUAGES.

Latin, Greek, French or German, if equally well taught, may be given equal value in the high school course. But in order to meet the requirements for admission to Indiana colleges generally, a student must have had not less than three full years' work in some one of these languages.

LATIN.

The study of Latin in the high school may be divided conveniently into periods of nine months each, whether or not these periods correspond to the length of the year in the several schools. Each period of nine months should be devoted to a distinct subject, the Elements of the Language, Caesar, Cicero and Virgil. These four subjects, or as many of them as the length of the course permits, should be taken in the order given above, and no subject should be begun until nine months has been spent upon the one immediately preceding. Schools having a three years' course should, therefore, omit Virgil altogether; those having a two years' course should omit Cicero. The course which gives nine months to the Elements and nine months to Caesar is a better course than one of the same length which distributes the last nine months among Caesar, Cicero and Virgil, or between any two of them.

A school library is as essential to good work in Latin as is a collection of apparatus to good work in Physics or Zoology. Thirty or forty dollars will buy a good working collection as a nucleus, and the following list is recommended as a good one from which to make selections:

Madvig's (Ginn & Co.) or Roby's (Macmillan) Latin Grammar; Kiepert's (Leach, Shewell & Sanborn) or Ginn & Co.'s Classical Atlas; Lewis' Latin Dictionary for Schools (Harper's); Harper's Dictionary of Classical Antiquities and Literature; Schreiber's Atlas of Classical Antiquities (Macmillan); Johnston's Latin Manuscript (Scott, Foresman & Co.); Gow's Companion to School Classics (Macmillan); Howard's Quantitative Pronounciation of Latin (Scott, Foresman & Co.); Mackail's Latin Literature (Scribner's); any good history of Rome; Plutarch's Lives; Roman Political Institutions, by Abbott (Ginn & Co.); History of Latin Literature, by Simcox (Harper's); Private Life of the Romans, by Preston & Dodge (B. H. Sanborn & Co.); Helps to the Intelligent Study of College Preparatory Latin, by Harrington (Ginn & Co.); Latin Phrase Book, by Meissner (Macmillan); Harper's Latin-English Dictionary; Smith's Dictionary of Greek and Roman Biography and Mythology, 3 vols. (Harper's); Ward Fowler's Julius Caesar (Putnah); Caius Julius Caesar, by Dodge (Houghton, Mifflin & Co.); Julius Caesar, by Dodge (Houghton, Mifflin & Co.); Julius Caesar, by Napoleon III (Harper's); Julius Caesar, by J. A. Froude (Harper's); Caesar's Conquest of Gaul, by T. Rice Holmes, London, 1899 (Macmillan); Roman Britain, by H. M. Scarth (Oxford); Roman Poets of the Augustan Age—Virgil, by Sellar (Oxford); Essays on the Poetry of Virgil, in connection with his life and times, by Nettleship (D. Appleton & Co.); Master Virgil, by Tunison (Robert Clark & Co., Cincinnati); Classic Myths, by Gayley (Ginn & Co.); Story of the Aeneid, Edward Brooks, Superintendent Public Schools, Philadelphia; Myths of Greece and Rome, by Guerber (American Book Co.); Johnston's Metrical Licenses of Virgil

(Scott, Foresman & Co.); Trollop's Cicero, 2 vols. (Harper's); Life of Cicero, by Forsyth (Scribner's); Catiline, Claudius and Tiberius, by Beesley (Longmans, Green & Co.); Cicero and the Fall of the Roman Republic, by Strachan—Davidson (Putnam's); Roman Life in the Days of Cicero, by Church (Dodd, Mead & Co.).

The first nine months in Latin should be devoted to the study of the elements of the language under the guidance of some one of the modern books for beginners. It may be safely said that good results may be secured from any book in the following list, and also that books not in this list should be adopted by experienced teachers only, who have themselves tested the books Collar and Daniel's (Ginn & Co.); Coy's (American Book Co.); Jones' (Scott, Foresman & Co.); Scudder's (Allyn & Bacon); Tuell & Fowler's (B. F. Sanborn). The main emphasis should be laid during the use of the beginner's book upon the pronunciation, the inflections, the order of words and the translations. In the average school time can hardly be spared for quantitative pronunciation, but the student should be well drilled in the Roman sounds of the letters and in accent. In regard to the inflections, nothing short of absolute mastery will suffice, and at least one-third of the recitation time should be devoted to blackboard drills upon declensions and conjugations until such mastery has been gained. In drilling the pupils to take the thought in the Latin order the teacher should follow the method outlined by Professor W. G. Hale (Ginn & Co.) and should give daily exercises. In translation the teacher should insist upon faultless English, fluent and idiomatic, and should prepare his own translations of even the easiest sentences with great care that they may serve as models for imitation by the class. At least nine months will be necessary for doing well the work given in any of the beginner's books named above, and schools having a year of less than nine months in length should carry this subject over into the second year.

During the remainder of the course the work will be centered upon some one of the three great classics, and the methods of the several periods will differ very slightly. In justice to the teacher the authorities should insist that all members of a class use the same text, and special texts for class-room should be provided and owned by the school. As the work goes on less and less attention need be given to inflections, but the drill in reading in the Latin order and in idiomatic translations should be maintained to the end. Special attention must be given throughout the rest of the course to syntax. The student should be examined every day upon the notes in his edition, and the teacher should test his knowledge by setting English sentences based upon the vocabulary and syntax of the Latin text for translation. These sentences should be short and easy, and are best made by the teacher from day to day; if, however, the teacher lacks time to compose the sentences he may draw them from such manuals as Collar's (Ginn & Co.); Daniel's (B. F. Sanborn); Moulton's (Ginn & Co.); Dodge & Tuttle's (American Book Co.), or Rigg's The Series in Latinum (Scott, Foresman & Co.). In addition to this translation there should be a systematic drill in syntax based upon one of the older methods (Jones' is, perhaps, the most thoroughly tried) which should be continued throughout the second (Caesarian) and third (Ciceronian) period. While Virgil is read, prose composition may be suspended and the time devoted to reports upon mythology based on assigned references to

works in the library. Sight translation, once a fetich, should be used with caution, and only in connection with the text of the next day's lesson. In Caesar a text may be selected from the following: Kelsey (Allyn & Bacon); Harper and Tolman, or Harkness (American Book Co.); Chase & Stuart (Eldridge & Bro.); Greenough (Ginn & Co.); Lowe and Ewing (Scott, Foresman & Co.).

It is recommended that the class read first Book I, Chapter 1-29 then Books II, III and IV, and then the omitted chapters of Book I, or an equivalent amount from Book V.

In Cicero the class should read first the four orations against Catiline, then one of the longer orations (e. g., the Manilian Law, the Milo, the Murena or Roscius, then if there is time for further reading, a selection from the letters will be found interesting and profitable. The following editions are the best: Kelsey (Allyn & Bacon); "D'Oge" (Sanborn, Boston); Greenough's (Ginn & Co.); Johnston's (Scott, Foresman & Co.).

In Virgil the reading should be confined to the Aeneid and Book III may well be postponed or omitted altogether. Scanning should be taught from the first, and either the advance or the review lesson ought to be scanned in full every day. The following editions are recommended: Greenough & Kittredge (Ginn & Co.); Comstock's (Allyn & Bacon); Frieze's six books and vocabulary (American Book Co.).

Practical suggestions on the teaching of the Latin in the hgih schools of Indiana will be found in a paper read before the Classical Section of the State Teachers' Association in December, 1896, by Professor Johnston, of Indiana University. It may be obtained without cost of Scott, Foresman & Co., 368 Wabash Ave., Chicago.

GREEK.*

1. A beginner's book, followed, if time permits, by the reading of easy selections from Xenophon.
2. Three or four books of the Anabasis, or two of the Anabasis and two of the Hellenica, with plentiful exercise in prose composition and some study of Greek history.
3. Three or four books of Homer, either Iliad or Odyssey, with careful study of forms and the heroic meter, and a general view of Greek literature.

GERMAN.*

1. Elementary German, using a beginner's book, supplementing the same with Guerber's Märchen und Erzählungen, and Storm's Immensee.
2. German Grammar and reading of Höher als die Kirche, Aus dem Leben eines Taugenichts, Der Neffe als Onkel and Der Bibliothekar.
3. Prose composition and reading of Der Fluch der Schönheit, Wilhelm Tell, Hermann and Dorothea, Minna von Barnhelm. A general view of German literature.

FRENCH.*

1. A standard course in elementary French, with exercise in composition, and the reading of L'Abbe Constantin and kindred selections from French literature.

*Course outlined by the City Superintendents' Association.

2. Continue the study of French Grammar and read Madame Therese, Coppee et Maupassant, and Contes de Daudet.
3. French composition and reading of Hugo's Hernani, Moliere's Le Bourgeois Gentilhomme, and Racine's Athalie.

LITERATURE AND COMPOSITION.

The object of the English course in the commissioned High School is to give the student the ability to speak his native language correctly, to write readily and effectively, to read with sympathy and insight, and thus to strengthen himself with the best thoughts of others, and to communicate his own best thoughts in an unmistakable way. To attain this object involves the teaching of literature and of composition. One recitation a day for four years should be given to English.

The teaching of composition should extend over the full period of four years, even if the subject can not be taught oftener than once a week. The reason for this is that composition is not a subject that seeks to impart a given amount of information; it is a subject that concerns itself with the student's ability to express himself at all times. This ability can be conveyed to the student only by drilling him in writing at all stages of his career. As he grows in thought, he must advance in expression; and hence practice in composition must be continuous until the student has the command of English suggested above.

There is less reason for making the study of literature continuous; in so far as the study of literature consists of information, it may be taught like history or science; but in so far as it is a training in taste, it requires continuous treatment. Add to this the fact that literature is a potent aid to composition, and it appears that, on the whole, literature ought to be taught continuously through the four years. If, however, only one of the two subjects can be taught continuously, that one subject should be composition.

As to the relative amount of time to be spent on literature and composition, it is suggested that approximately two-fifths of the time given to English be devoted to composition.

This course of study is recommended for the non-commissioned and township graded High Schools of the State also, and teachers are urged to follow the suggestions for commissioned High Schools whenever possible.

The work should be done so well that pupils completing one, two or three years in the non-commissioned schools should receive credit for same upon entering any of the commissioned schools.

COMPOSITION.

The work in Composition should consist of constant practice in writing. The two great sources of material that the pupil should use in his work are, (1) his own experience, (2) Literature. The work in Literature and Composition should be so correlated as to make the first furnish a great deal of the material for the second, while the second should

Lauramie Township Graded High School, Tippecanoe County, Ind.
Fig. 19.

strongly supplement the first. Themes or essays upon subjects well within the student's range should be called for at least once a week. Many short papers, daily, if possible, rather than longer papers weekly, will contribute to the ends sought. Difficult, complex subjects, beyond the reach of the immature mind, should never be given. These papers should be corrected, discussed and returned for rewriting. Careful, conscientious supervision of the work on the part of the teacher, and judicious, sympathetic criticism of all the work on the part of the teacher and pupils is strongly to be desired. There is a large part of the habit-forming element in composition. Correction should involve points in spelling, grammar, punctuation, choice of words and construction of paragraphs. The teaching of rhetoric should be made distinctly subordinate to the teaching of composition.

The study of standard authors as models; for example, Irving and Stevenson in description; Hawthorne, Poe and James in narration; Thoreau and Martin in exposition; Burke, Webster and Beecher in argumentation. Of these forms of discourse, description and narration should receive most attention. Exposition should have more time than argumentation. It is not necessary, however, that pupils spend a great deal of time in learning to make sharp distinctions between these various forms of discourse.

No one text-book in rhetoric or composition will be found adapted to the needs of every school. The text-books named below are all practical books; but the teacher must remember that in composition teaching no text-book can take the place of stimulating class-room instruction.

Studies in English Composition, Keeler and Davis; Outlines of Rhetoric, Genung; Handbook of Composition, Hart; Foundations of Rhetoric, Hill; English Composition, Newcomer; Exercises in Rhetoric and Composition, Carpenter; School English, Butler; Composition-Rhetoric, Scott and Denny; Composition and Rhetoric for Schools, Herrick and Damon; Composition and Rhetoric, Lockwood and Emerson; Talks on Writing English, Arlo Bates; English Composition, Barrett Wendell; Short Story Writing, Charles Raymond Barrett; Philosophy of the Short Story, Brander Matthews; Story Composition, Sherman Cody; The Story Teller's Art, Charity Dye.

LITERATURE.

The work in Literature should consist mainly of the study of representative selections from the work in English and American authors. The simpler forms of writing, those that the student can interpret most easily, should be first presented, narrative poems and those having strongly marked symbols coming before descriptive poems and those in which the charm is largely in suggestion. As the student gains in interpretative power, the more difficult forms may be put before him. Thus the Literature work might fitly begin with selections from Longfellow and Whittier, and end with Shakespeare, Browning and Carlisle.

The emphasis should at all times be placed upon the study of the literature rather than upon books about literature. But this should not mean that some very systematic work should not be done in studying the development of the literature and the place occupied by each author in this

development. This work may be in the form of talks by the instructor, or some of the briefer manuals may be put into the hands of the pupils.

While it is true that it is better to know a few books well than to know many imperfectly, yet it is also true that one purpose of this work is to give an idea of the extent of the fields covered. To that end a number of masterpieces should be studied in reasonable detail, while many more should be read rapidly for special points and to give some hint to the pupil of the great variety and diversity of literary products. The greatest objection to a set course of masterpiece study is that it gives an utterly false perspective of the subject. This may in some measure be corrected by the means suggested.

In the following list the dates refer to the year of graduation, i. e., a class graduating in 1902 should read during its high school career the books named under that date.

I. For General Reading and Composition work:

	1902.	1903.	1904.	1905.
Shakespeare—Merchant of Venice	*	*	*	*
Shakespeare—Julius Cæsar		*	*	*
Addison—De Coverley Papers	*	*	*	*
Tennyson—The Princess	*	*		*
Lowell—Vision of Sir Launfal	*	*	*	*
Scott—Ivanhoe	*	*	*	*
Coleridge—Ancient Mariner	*	*	*	*
Pope—Iliad, I, VI, XXII, XXIV	*	*	*	*
Goldsmith—Vicar of Wakefield	*			
Cooper—Last of the Mohicans	*	*	*	*
George Eliot—Silas Marner		*	*	*
Carlyle—Essay on Burns				

II. For Minute and Critical Study.

Shakespeare—Macbeth	*	*	*	*
Milton—L'Allegro, Il Penseroso, Comus, Lycidas	*	*	*	*
Macaulay—Milton and Addison	*	*	*	*
Burke—Conciliation with America	*	*	*	*

(*) An asterisk indicates the year a book is to be used.

It is greatly to be desired that every high school be supplied with a large number of standard works suited to the needs of boys and girls of high school age. Opportunity would thus be offered for directing to considerable extent the outside reading of the boys and girls at this important period of their mental development. For purposes of general reading and culture it is suggested that as many of the works named below, and others of similar character, as can be supplied be placed on the shelves of the library in every high school of the State:

(d) LIST OF BOOKS FOR HIGH SCHOOLS—SUPPLEMENTARY.

Cervantes, S. M. de. Don Quixote; abridged by Clifton Johnson.
Hugo, Victor. Jean Valjean; ed. by Sare E. Wiltse.
Stevenson, R. Louis. Treasure Island.
Morse, John T. John Quincy Adams.
Shumway, Edgar E. Day in Ancient Rome.
Harrison, Benj. This Country of Ours.
Ball, Robert S. Starland.
Bulfinch, Thos. Age of Fable.
Bulwer-Lytton, Sir Edward. Last Days of Pompeii.
Guerber, H. A. Legends of the Middle Ages.
Hale, E. E. Man Without a Country, and Five Other Stories.
Curtis, Geo. Wm. Prue and I.
Dickens, Chas. Story of Oliver Twist; condensed by Ella B. Kirk.
Mathews, Wm. Getting on in the World; or Hints on Success in Life.
Heilprin, Angelo. Earth and Its Story.
Shaler, N. S. Story of Our Continent.
Thoreau, Henry D. Succession of Forest Trees.
Byron, Lord. Childe Harold; ed. by Andrew J. George.
Dryden, John. Palamon Arcite; ed. by W. H. Crawshaw.
Goldsmith, Oliver. She Stoops to Conquer.
Wordsworth, Wm. On the Intimations of Immortality.
Griffis, Wm. Elliott. Brave Little Holland and What She Taught Us.
Hodgin, Cyrus W.. Indiana and the Nation.
Marcus Aurelius Antoninus. The Thoughts of; ed. by Edwin Ginn.
Campbell, Thos. Pleasures of Hope.
Emerson, R. W. American Scholar, Self-Reliance and Compensation.
Keats, John. Endymion; ed. by Gollancz.
Moore, Thos. Lalla Rookh.
Pope, Alex. Essay on Man.
Sophocles. Antigone and Oedipus King; tr. by Coleridge.
Moore, Sir Thos. Utopia; ed. by Gollancz.
Wallace, Lew. Ben Hur.
Warner, Chas. Dudley. Being a Boy.
Lamartine, A. de. Oliver Cromwell.
Mahaffy, J. P. Old Greek Life.
Whipple, Edwin P. Character and Characteristic Men.
Plato. Apology, Crito; tr. by Paul E. More; Republic.
Mulock. John Halifax, Gentleman.
Kipling, R. Light that Failed; Captain Courageous.
Dickens, Chas. David Copperfield; Nicholas Nickleby.
Bryant, Wm. C. Thanatopsis.
Brooks. Lecture on Biography.
Burke. Speech on Conciliation with America.
Coleridge. Ancient Mariner.
Cooper. Last of the Mohicans.
DeQuincey. Revolt of the Tartars.
Dickens, Chas. Tale of Two Cities.

Epictetus.
Gayley. Classic Myths in English Literature.
Eliot, George. Silas Marner.
Goldsmith, Oliver. Vicar of Wakefield; Deserted Village; The Traveler.
Irving, W. Sketch Book.
Johnson. Rasselas.
Macaulay. Essays on Addison and Milton.
Milton. Paradise Lost, Bks. I, II, and Lycidas; L'Allegro, Il Penseroso, Comus.
Plutarch. Lives.
Ruskin. Selections.
Scott. Ivanhoe; Tales of a Grandfather.
Shakespeare. Merchant of Venice; Julius Caesar; Hamlet; Macbeth; ed. by Hudson.
Coverley, Sir Roger de. Papers.
Tennyson. The Princess; Enoch Arden; In Memoriam; Locksley Hall.
Webster. Speeches; First Bunker Hill Address.
White. Natural History of Selborne.
Wright, C. D. Industrial Evolution of the U. S.
Clodd, Edw. Story of Primitive Man.
Atkinson, Philip. Electricity for Everybody.
Grinnell, G. B. Story of the Indian.
Lodge, H. C. and Roosevelt, Theodore. Hero Tales from American History.
Walker, F. A. Making of the Nation, 1783-1817.
Dana. Two Years Before the Mast.
Poe. Raven.
Schurz, Carl. Abraham Lincoln.
Chaucer. Prologue, The Knight's Tale, and The Nun's Priest's Tale.
Lowell. Vision of Sir Launfal; Books and Libraries; My Garden Acquaintance.
Franklin, Benj. Poor Richard's Almanac and Autobiography.
Hawthorne. Great Stone Face; Snow-Image.
Whittier. Snow-Bound; Maud Muller.
Emerson. Behavior; Books.
Everett. Character of Washington.
Longfellow. Evangeline; Building of the Ship; Courtship of Miles Standish.
Tennyson. Charge of the Light Brigade; Death of the Old Year; Crossing the Bar.
Wordsworth, Wm. To a Skylark; To the Cuckoo; Daffodils; To the Daisy.
Burns. The Cotter's Saturday Night; To a Mouse; For A' That and A' That; Auld Lang Syne.
Lamb. Dream Children; Dissertation Upon Roast Pig; Barbara S——; Old China.
Coleridge. Kuble Khan.
Bacon. Essays: of Travel; of Studies; of Suspicion; of Negotiating; of Masques and Triumphs.
Lowell. Abraham Lincoln; Commemoration Ode.
Holmes. Autocrat of the Breakfast Table.

Hughes. Tom Brown's School Days.
Larcom, Lucy. A New England Girlhood.
Longfellow. Children's Hour.
Dickens, Chas. Christmas Carol.
St. Pierre. Paul and Virginia.
Brown, John. Rab and His Friends.
Carlyle. Goethe, an Essay.
Gray. Elegy in a Country Churchyard.
Lamb. Essays from Elia.
Thomson. The Seasons.
Thackeray. Lighter Hours.
Homer. Iliad; Odyssey; tr. by Bryant.
Aeschylus. Prometheus Bound; tr. by More.
Euripides. Alkestis; Medea; Hippolytos; tr. by Lawton.
Dante. Divine Comedy; tr. by Norton.
Omar Khayyám. Rubáiyát; tr, by Fitzgerald.
Fiske. War of Independence.

COURSE IN HISTORY AND CIVICS FOR COMMISSIONED HIGH SCHOOLS.

SECOND YEAR—
History of Greece (first half year).
History of Rome (second half year).

THIRD YEAR—
History of England (whole year), or
History of France (first half of year),
History of England (second half of year).

FOURTH YEAR—
American History and the Civil Government of United States and Indiana (throughout the year).

TEXT-BOOKS—
History of Greece. Myers, Botsford.
History of Rome. Allen.
History of England. Larned; Montgomery; Oman; Coman and Kendall.
History of France. The Growth of the French Nation, Macmillan.
American History. McLaughlin; McMaster; Channing; Fiske.
Civics—U. S. Fiske; Hinsdale; Macy; Wright.
Civics—Indiana. Rawles; Hodgin.

It is recommended that the third year's work, while particularly devoted to France and England, be made to include a general survey of mediaeval and modern history. As a basis for such study France is to be preferred. If, however, the year consists of at least nine full months, this subject may be taken up during the first half, and the remaining time be devoted to England. In this case it would be well to concentrate the work in English history on the development of English institutions since the accession of the Tudors, going over briefly earlier phases of English history like the Norman conquest, Magna Charta and the beginning of Parliament.

In the fourth year it is desirable that the work in American History and Civil Government be as closely correlated as possible. Thus, the study of the text of the Articles of Confederation and of the Constitution should come in connection with the study of their historical setting.

Among the books that should be placed in the library as reference books in History may be named the following:

History for Ready Reference. Larned, 6 vols.
History of Rome. Duruy, 8 vols.
History of Greece. Botsford.
History of Rome. Gibbon.
History of Middle Ages. Duruy.
History of France. Duruy.
History of England. Froude.
History of England. Green.
History of England. Oman.
History of England. Guest.
The Dutch Republic. Motley.
United Netherlands. Motley.
Periods of European History. The Macmillan Co.
Ferdinand and Isabella. Prescott.
Philip II. Prescott.
England in the Eighteenth Century. Leckey, 8 vols.
Civilization During the Middle Ages. Adams.
Causes of the French Revolution. Dabney.
History of the People of the United States. McMaster.
Twelve English Statesmen. The Macmillan Co.
American Statesmen Series. Houghton, Mifflin & Co.
History of the United States. Bancroft.
Epochs of American History. Longmans, Green & Co.
American History Series. Scribner's.
Schouler's History of the United States.
Rhodes' History of the United States.
Critical Period of American History.
American Common Wealth Series.
Bryce's American Commonwealth.

Also each school should be supplied with:

MacCoun's Historical Geography of Europe. Ancient and Classical Period.
MacCoun's Historical Geography of Europe. Mediaeval and Modern Period.
MacCoun's Historical Geography of the United States, or some series of charts equivalent thereto.

(e) GENERAL REFERENCES.

SUGGESTIVE TITLES.

The Universal Encyclopedia. D. Appleton & Co.
The International Encyclopedia. Dodd, Mead & Co.
Library of Literary Criticism of English and American Authors. Moulton. Geo. F. Bass, General Agent, Indianapolis, Ind.
Webster's International Dictionary. G. & C. Merriam & Co.
The Standard Dictionary. Funk & Wagnalls.
Gayley's Classic Myths. Ginn & Co.
Guerber's Myths, 3 vols. American Book Co.
Bulfinch's Mythology. Lee & Shepard.
A Study of English and American Poets. Clark.
Plutarch's Lives. A. L. Burt.
The Iliad of Homer. Bryant. Houghton, Mifflin & Co.
The Odyssey of Homer. Palmer. Houghton, Mifflin & Co.
Crabb's English Synonyms. Harper Bros.
Ward's English Poets, 4 vols. Macmillan Co.
Craik's English Prose, 5 vols. Macmillan Co.
Stedman and Hutchinson's Library of American Literature.
Stedman's American Anthology. Houghton, Mifflin & Co.
Student Editions of the Poets.
The English Novel (Lanier). Scribners.
The Historic Note-Book. Lippincott.
Handy Dictionary of Biography. Morris. Coats & Co.
Dictionary of the Noted Names in Fiction. Wheeler. Houghton, Mifflin & Co.
The Reader's Handbook. Brewer. Lippincott.

North View of Clear Creek Township High School, Huntington County.
Fig. 20.

4. List of Commissioned High Schools, 1902.

The State Board of Education will make annual inspection of many of the high schools of this State. The following is an alphabetical arrangement of the high schools now on the commissioned list:

Akron	James Hines.
Angola	J. W. Wyandt.
Albany	H. S. Kaufman.
Auburn	B. B. Harrison.
Attica	E. H. Drake.
Anderson	J. W. Carr.
Albion	W. A. Fox.
Aurora	J. R. Houston.
Alexandria	I. V. Busby.
*Andrews	Wm. Eisenmann.
Brownstown	E. W. Davis.
Broad Ripple	S. B. Plasket.
Boonville	C. E. Clark.
*Brazil	W. H. Fertich.
Bedford	W. E. Alexander.
Bloomington	J. K. Beck.
Bloomfield	E. R. Mason.
Bluffton	W. A. Wirt.
Boswell	C. F. Miller.
Brookville	H. L. Smith.
Bremen	W. F. Ellis.
Butler	H. G. Brown.
Carmel	J. E. Retherford.
Chalmers	E. C. Green.
Charlestown	W. A. Collings.
Crawfordsville	W. A. Millis.
Clinton	H. S. Schell.
Carthage	J. H. Scholl.
Crown Point	F. F. Heighway.
College Corner	E. P. Wilson.
Columbus	T. F. Fitzgibbon.

*Commissioned to June 30, 1902.

Cambridge City ..... Lee Ault.
Cicero ..... F. A. Gause.
Connersville ..... W. S. Rowe.
Columbia City ..... C. L. Hottel.
Converse ..... S. L. Heeter.
Covington ..... W. P. Hart.
Cayuga ..... Colfax Martin.
Corydon ..... Jesse W. Riddle.
Chesterton ..... S. H. Rowe.

Dana ..... E. M. Hughes.
Danville ..... O. C. Pratt.
Decatur ..... H. A. Hartman.
Delphi ..... E. L. Hendricks.
Dublin ..... J. C. Mills.
Dunkirk ..... F. B. Gray.

East Chicago ..... W. C. Smith.
Evansville ..... W. A. Hester.
Elwood ..... C. S. Meek.
Edinburg ..... C. F. Patterson.
Elkhart ..... D. W. Thomas.

Flora ..... G. B. Asbury.
Frankfort ..... G. L. Roberts.
Franklin ..... Horace Ellis.
Fort Wayne ..... J. N. Study.
Fountain City ..... Curtis Thornburg.
Fowler ..... Lewis Hoover.
Fortville ..... W. A. Myers.
Fairmount ..... C. H. Copeland.
Frankton ..... J. B. Fagan.

Garrett ..... E. E. Lollar.
Greenwood ..... J. A. Robinson.
Greentown ..... H. B. Dickey.
Greenfield ..... A. E. Martin.
Goshen ..... V. W. Hedgepeth.
Gosport ..... Daniel McCarver.
Greensburg ..... D. M. Geeting.
Goodland ..... J. C. Dickerson.
Gas City ..... J. H. Jeffrey.

Hartford City ..... C. H. Drybread.
Hagerstown ..... O. L. Voris.
Hobart ..... W. R. Curtis.
Huntingburg ..... F. B. Kepner.
Huntington ..... R. I. Hamilton.
Hammond ..... W. H. Hershman.

Indianapolis ..... C. N. Kendall.
Irvington ..... O. G. Stanton.

Jasper ..... E. F. Sutherland.
Jonesboro ..... R. W. Himelich.
Jeffersonville ..... A. C. Goodwin.
Kirklin ..... F. B. Long.
Knightstown ..... W. D. Kerlin.
Knox ..... Walter Dunn.
Kokomo ..... R. A. Ogg.
Kendallville ..... D. A. Lambright.
Kentland ..... E. B. Ellis.
Kewanna ..... J. B. Lemasters.

Ladoga ..... J. F. Warfel.
Linton ..... Oscar Dye.
Lowell ..... Wm. Sheets.
Logansport ..... A. H. Douglas.
Lebanon ..... C. A. Peterson.
Lafayette ..... Edward Ayres.
Lagrange ..... W. H. Brandenburg.
Laporte ..... J. A. Wood.
Lawrenceburg ..... T. H. Meek.
Liberty ..... J. W. Short.
Ligonier ..... W. C. Palmer.
Lima ..... S. K. Ganiard.

Montpelier ..... L. E. Kelley.
Monticello ..... J. W. Hamilton.
Madison ..... C. M. McDaniel.
Markle ..... John Reber.
Martinsville ..... J. E. Robinson.
Middletown ..... H. N. Coffman.
Marion ..... B. F. Moore.
Michigan City ..... P. A. Cowgill.
Mishawaka ..... B. J. Bogue.
Mitchell ..... J. L. Clauser.
Monon ..... J. H. Shaffer.
Mt. Vernon ..... E. S Monroe.
Muncie ..... W. R. Synder.
*McCordsville ..... W. B. Stookey.
Mooresville ..... Alaska Eaton.

*New Augusta ..... F. C. Senour.
Newport ..... J. W. Kendall.
Noblesville ..... J. F. Haines.
New Albany ..... C. A. Prosser.
New Harmony ..... Joseph Kelley.
*New London ..... A. E. Jones.
North Manchester ..... H. S. Hippensteel.
North Vernon ..... G. P. Weedman.
New Castle ..... J. C. Weir.

*Commissioned to June 30, 1902.

Nappanee	S. W. Baer.
North Judson	O. O. Whitenack.
Odon	W. M. Abel.
Orleans	C. E. Spaulding.
Oxford	M. F. Orear.
Pendleton	E. D. Allen.
Portland	J. A. Hill.
Pennville	W. W. Knox.
Peru	A. A. Campbell.
Petersburg	Sylvester Thompson.
Plymouth	R. A. Chase.
Princeton	C. N. Peak.
Rensselaer	W. H. Sanders.
Rockville	J. F. Thornton.
Richmond	T. A. Mott.
Rockport	F. S. Morgenthaler.
Remington	M. R. Marshall.
Rising Sun	R. L. Thiebaud.
Roachdale	E. C. Dodson.
Rochester	J. F. Scull.
Rushville	A. G. McGregor.
*Roann	H. F. Black.
Redkey	J. E. Orr.
Sheridan	C. L. Mendenhall.
Spencer	A. L. Whitmer.
Shelbyville	J. H. Tomlin.
Seymour	H. C. Montgomery.
Salem	H. B. Wilson.
Summittville	A. C. Wooley.
Shoals	W. A. Bowman.
South Whitley	O. H. Bowman.
Sullivan	W. C. McCullough.
South Bend	Calvin Moon.
Shipshewana	J. W. Hostettler.
Tipton	I. L. Conner.
Thorntown	L. B. O'Dell.
Terre Haute	W. H. Wiley.
Upland	W. W. Holliday.
Union City	Linnaeus Hines.
Valparaiso	C. H. Wood.
Veedersburg	W. C. Brandenburg.
Vincennes	A. E. Humke.
Vevay	E. M. Dangdale.

*Commissioned to June 30, 1902.

Warren ..... O. G. Hagler.
Wabash ..... M. W. Harrison.
Walkerton ..... I. C. Hamilton.
Warsaw ..... Noble Harter.
Washington ..... W. F. Axtell.
Waveland ..... W. V. Mangrum.
Westfield ..... W. A. Jessup.
Waterloo ..... M. D. Smith.
Whiting ..... R. L. Hughes.
Williamsport ..... S. C. Hanson.
Winamac ..... W. H. Kelly.
Winchester ..... O. R. Baker.
Windfall ..... O. H. Williams.
Worthington ..... W. B. VanGorder.
West Lafayette ..... E. W. Lawrence.

Zionsville ..... H. F. Gallimore.

5. High School Statistics for the Year Ending July 31, 1902.

NUMBER OF HIGH SCHOOLS AND GRADUATES.

Number.	COUNTIES.	Number of Township, Town or City Graded High Schools, Including All Schools Commissioned and Non-commissioned, of wo or More Teachers Doing High School Work in Addition to Common Branches.	Number of Township, Town or City High Schools that are Commissioned by State Board of Education.	Number of Schools Having Only One Teacher, the District School.	Number of Graduates from Common Branches.	Number Graduates from Township, Town or City High Schools, Noncommissioned.	Number Graduates from Township, Town or City Commissioned High Schools.
1	Adams.	8	2	82	71	2	17
2	Allen	8	1	164	232	17	34
3	Bartholomew	8	1	178	164	31	27
4	Benton	10	3	71	138	19	31
5	Blackford	3	2	44	40	. .	10
6	Boone	5	3	113	156	8	48
7	Brown.	. .	. .	76	25	.	.
8	Carroll.	13	2	90	216	31	16
9	Cass	9	1	104	205	5	49
10	Clark	8	2	78	158	10	29
11	Clay	3	1	92	117	. .	5
12	Clinton	6	2	94	167	20	41
13	Crawford	5	. .	79	49	5	. .
14	Daviess	7	2	115	134	.	32
15	Dearborn	3	2	86	58	. .	30
16	Decatur	10	1	68	108	12	18
17	Dekalb	7	4	89	107	5	35
18	Delaware	11	3	90	294	32	40
19	Dubois.	5	3	90	53	5	15
20	Elkhart	8	3	155	288	45	75
21	Fayette	8	1	34	55	15	15
22	Floyd	3	1	36	160	10	26
23	Fountain	12	3	73	159	.	32
24	Franklin	5	1	74	35	10	6
25	Fulton.	8	3	87	124	18	22
26	Gibson.	12	2	107	72	28	28
27	Grant	7	5	103	337	11	59
28	Greene.	1	3	148	147	2	17
29	Hamilton	11	5	74	364	30	57
30	Hancock.	10	3	66	102	25	20
31	Harrison	8	1	136	123	.	55
32	Hendricks.	12	1	65	129	46	55
33	Henry	14	3	58	73	7	33
34	Howard	9	3	69	234	. .	39
35	Huntington	14	4	95	209	34	43
36	Jackson	11	2	93	62	. .	31
37	Jasper.	3	2	103	85		26
38	Jay	9	4	100	165	8	35
39	Jefferson	8	2	95	100	13	28
40	Jennings	6	1	72	60	27	12

NUMBER OF HIGH SCHOOLS AND GRADUATES—Continued.

Number.	COUNTIES.	Number of Township, Town or City Graded High Schools, including All Schools Commissioned and Non-commissioned, of Two or More Teachers Doing High School Work in Addition to Common Branches.	Number of Township, Town or City High Schools that are Commissioned by State Board of Education.	Number of Schools Having Only One Teacher, the District School.	Number of Graduates from Common Branches.	Number Graduates from Township, Town or City High Schools; Noncommissioned.	Number Graduates from Township, Town or City Commissioned High Schools.
41	Johnson	10	3	82	187	29	43
42	Knox	8	1	108	84	14	16
43	Kosciusko	14	1	126	169	36	24
44	Lagrange	13	3	69	98	23	34
45	Lake	5	6	92	152	..	49
46	Laporte	10	1	124	159	50	34
47	Lawrence	4	2	93	43	4	13
48	Madison	8	6	131	407	5	85
49	Marion	12	4	72	754	27	285
50	Marshall	11	2	113	125	53	17
51	Martin	1	1	92	23	6	6
52	Miami	14	2	104	146	22	48
53	Monroe	1	1	92	128	....	40
54	Montgomery	13	3	106	203	38	43
55	Morgan	10	2	8	206	10	25
56	Newton	3	2	63	69	..	19
57	Noble	6	1	89	114	26	24
58	Ohio	1	1	25	54	...	6
59	Orange	3	1	94	18	...	7
60	Owen	5	2	85	29	25	17
61	Parke	5	1	98	76	9	11
62	Perry	1	....	97	41	....	.....
63	Pike	1	1	95	47	...	15
64	Porter	7	2	85	83	16	6
65	Posey	14	2	67	104	17	18
66	Pulaski	7	1	94	77	4	10
67	Putnam	17	2	108	147	22	29
68	Randolph	13	2	113	48	14	20
69	Ripley	7	....	96	48	20	.....
70	Rush	10	2	73	144	34	16
71	Scott	4	....	47	51	13	...
72	Shelby	17	1	93	109	11	17
73	Spencer	7	....	98	48	....	11
74	Starke	2	2	64	58	...	9
75	St. Joseph	7	3	107	111	28	62
76	Steuben	9	1	81	57	25	14
77	Sullivan	9	1	109	49	10	24
78	Switzerland	2	1	72	34	6	10
79	Tippecanoe	18	2	120	317	39	66
80	Tipton	4	2	69	52	...	26
81	Union	5	2	30	56	9	17
82	Vanderburgh	1	1	58	348	6	70
83	Vermillion	11	4	56	76	....	12
84	Vigo	3	1	86	127	.....	64
85	Wabash	14	5	102	268	15	70
86	Warren	4	1	87	58	28	10
87	Warrick	3	1	101	26	5	10
88	Washington	7	1	122	145	14	11
89	Wayne	13	5	61	284	31	97
90	Wells	9	1	89	28	18	4
91	White	7	4	100	140	3	43
92	Whitley	6	2	83	184	15	20
	Total	704	185	8,053	12,084	1,313	2,750

COST OF NONCOMMISSIONED HIGH SCHOOLS.

Number.	COUNTIES.	Number Pupils Enrolled in Township, Town or City Noncommissioned High Schools.	Total Amount Paid Teachers in Noncommissioned High Schools in Township, Town or City. (This includes Superintendent's wages if he teaches.)	Total Amount for Apparatus, Books, Furniture, Stoves and Other Appliances in Township, Town or City Noncommissioned High Schools (not including Janitor Fees).	Total Current Cost of Maintaining All Noncommissioned High Schools in Township, Town or City.	Average Cost Per Pupil for Education in Noncommissioned Township, Town or City High Schools.
1	Adams	40	$1,288 00	$140 00	$1,428 00	$35 00
2	Allen	176	2,475 75	42 00	2,517 75	14 30
3	Bartholomew	207	3,505 00	295 00	3,800 00	18 35
4	Benton	145	3,520 00	304 00	3,824 00	26 34
5	Blackford	30	762 50	30 00	792 50	26 41
6	Boone	41	720 00	80 00	800 00	19 52
7	Brown (None)					
8	Carroll	228	5,496 00	520 00	6,016 00	26 00
9	Cass	243	4,093 00	500 00	4,593 00	18 90
10	Clark	144	2,255 00	25 00	2,280 00	15 83
11	Clay	45	558 00	300 00	858 00	19 00
12	Clinton	149	3,221 00	252 00	3,473 00	23 30
13	Crawford	115	1,752 00	101 00	1,853 00	16 11
14	Daviess	69	1,325 00	201 58	1,526 58	22 12
15	Dearborn (No report)					
16	Decatur	79	2,236 53	80 00	2,316 53	29 32
17	Dekalb	80	1,928 00	124 72	2,152 72	26 91
18	Delaware	158	3,889 00	397 00	4,286 00	27 00
19	Dubois	75	1,221 25	31 80	1,253 05	16 70
20	Elkhart	215	3,665 00	100 00	3,765 00	17 40
21	Fayette	137	3,325 50	383 00	3,708 50	27 07
22	Floyd	42	1,356 00	213 00	1,569 00	37 27
23	Fountain	168	4,421 00	799 00	5,220 00	31 00
24	Franklin	68	2,150 00	290 00	2,440 00	35 88
25	Fulton	116	1,815 00	45 00	1,860 00	16 01
26	Gibson	247	5,942 84	762 00	6,704 84	27 15
27	Grant	125	1,990 00	110 00	2,100 00	16 80
28	Greene	27	480 00		480 00	17 77
29	Hamilton	185	4,506 00	635 00	5,141 00	23 00
30	Hancock	143	3,044 00	140 00	3,184 00	22 25
31	Harrison	5	90 00		90 00	18 00
32	Hendricks	278	5,646 00	1,131 00	6,777 00	24 37
33	Henry	205	5,141 50	612 50	5,754 00	28 07
34	Howard	92	2,036 00	210 00	2,246 00	24 41
35	Huntington	360	4,978 00	706 00	5,684 00	18 94
36	Jackson	312	3,574 25	129 52	3,703 77	11 86
37	Jasper (None)					
38	Jay	76	1,290 00	60 17	1,350 17	17 76
39	Jefferson	117	1,642 00	90 00	1,732 00	14 80
40	Jennings	186	2,423 10	157 83	2,580 93	13 87
41	Johnson	173	3,463 35	359 00	3,822 35	23 74
42	Knox	274	4,158 00	325 00	4,483 00	16 36
43	Kosciusko	358	5,103 00	685 00	5,788 00	16 16
44	Lagrange	164	3,098 00	527 00	3,625 00	22 10
45	Lake	38	450 00	400 00	850 00	22 40
46	Laporte	333	6,954 00	7,546 75	14,500 75	43 54
47	Lawrence	52	660 00	122 00	782 00	15 55
48	Madison	86	1,236 00	407 63	1,643 63	19 11

COST OF NONCOMMISSIONED HIGH SCHOOLS—Continued.

Number.	COUNTIES.	Number Pupils Enrolled in Township, Town or City Noncommissioned High Schools.	Total Amount Paid Teachers in Noncommissioned High Schools in Township, Town or City. (This includes Superintendent's wages if he teaches.)	Total Amount for Apparatus, Books, Furniture, Stoves and Other Appliances in Township, Town or City Noncommissioned High Schools (not including Janitor Fees).	Total Current Cost of Maintaining All Noncommissioned High Schools in Township, Town or City.	Average Cost Per Pupil for Education in Noncommissioned Township, Town or City High Schools.
49	Marion	243	$6,765 00	$2,540 00	$9,305 00	$38 29
50	Marshall	283	5,715 00	414 00	6,129 00	21 65
51	Martin	23	570 00	701 12	1,271 12	55 27
52	Miami	359	2,867 44	1,156 29	4,025 73	11 21
53	Monroe (None)					
54	Montgomery	422	6,716 00	487 00	7,203 00	17 00
55	Morgan	210	3,760 00	230 00	3,990 00	19 00
56	Newton	103	1,650 00	425 00	2,075 00	20 70
57	Noble	101	2,460 00	511 00	2,971 00	29 41
58	Ohio (None)					
59	Orange	75	1,600 00	150 00	1,750 00	23 33
60	Owen	70	1,460 00		1,460 00	20 77
61	Parke	93	2,089 50	667 82	2,757 32	29 65
62	Perry	25	1,470 00		1,470 00	58 50
63	Pike (No report)					
64	Porter	353	4,303 90	147 00	4,450 90	12 61
65	Posey	82	1,699 00	415 00	2,114 00	25 80
66	Pulaski	138	1,958 75	197 57	2,156 32	15 62
67	Putnam	328	5,537 48	441 00	5,978 48	18 22
68	Randolph	212	3,942 00	288 77	4,230 77	25 43
69	Ripley	68	1,572 00	46 00	1,618 00	23 81
70	Rush	252	5,364 35	556 00	5,920 35	23 49
71	Scott	132	1,663 00	110 00	1,773 00	13 43
72	Shelby	325	6,502 37	729 00	7,231 37	22 25
73	Spencer	61	952 00	201 00	1,153 00	19 00
74	Starke	9	250 00	249 04	499 04	55 56
75	St. Joseph	127	2,811 10	450 00	3,261 10	25 67
76	Steuben	238	3,217 00	169 00	3,386 00	14 22
77	Sullivan	119	1,538 85	254 40	1,793 25	15 07
78	Switzerland	212	1,711 75	434 86	2,146 61	10 12
79	Tippecanoe	350	6,978 00	864 00	7,842 00	22 40
80	Tipton	100	1,357 00	75 00	1,432 00	14 32
81	Union	78	2,414 00	251 00	2,665 00	36 26
82	Vanderburgh	66	2,546 15	454 00	3,000 15	45 45
83	Vermillion	100	3,700 00		3,700 00	37 00
84	Vigo	49	1,570 00	150 00	1,720 00	38 00
85	Wabash	247	4,832 00	80 00	4,912 00	25 66
86	Warren	89	1,561 00	100 00	1,661 00	18 66
87	Warrick	80	1,214 50	900 00	2,114 50	26 43
88	Washington	95	1,574 50	80 05	1,654 55	17 42
89	Wayne	187	5,596 00	705 00	6,301 00	33 70
90	Wells	209	4,200 00	355 00	4,555 00	21 79
91	White	150	3,151 00	229 00	3,380 00	22 53
92	Whitley	145	6,062 00	317 00	3,379 00	23 30
	Total	13,214	$248,787 21	$37,001 42	$285,788 63	$21 63

COST OF COMMISSIONED HIGH SCHOOLS.

Number.	COUNTIES.	Number of Pupils Enrolled in Township, Town or City Commissioned High Schools.	Total Amount Paid Teachers in Commissioned High Schools.	Total Amount Paid for Apparatus, Books, Furniture and Stoves (not including Janitor Fees).	Total Cost of Maintaining Commissioned High Schools.	Average Cost per Pupil in Commissioned High Schools.
1	Adams	75	$3,515 00	$150 00	$3,665 00	$48 87
2	Allen	421	11,895 63		11,859 63	28 25
3	Bartholomew	195	4,265 00	375 00	4,640 00	23 78
4	Benton	202	3,960 00	439 00	4,399 00	21 77
5	Blackford	130	3,730 00	108 00	3,838 00	29 52
6	Boone	284	5,860 00	245 00	6,105 00	21 50
7	Brown (None)					
8	Carroll	162	4,296 00	435 00	4,731 00	27 25
9	Cass	331	7,005 00	825 00	7,830 00	23 65
10	Clark	216	6,220 00	730 00	6,950 00	32 17
11	Clay	96	1,800 00		1,800 00	18 75
12	Clinton	303	6,147 00	2,924 00	9,071 00	29 36
13	Crawford (None)					
14	Daviess	213	4,440 00	200 00	4,640 00	27 45
15	Dearborn	137	5,425 75	146 19	5,571 94	40 67
16	Decatur	143	3,500 00	500 00	4,000 00	28 00
17	Dekalb	232	10,595 00	1,122 00	11,717 00	50 76
18	Delaware	425	10,955 00	543 00	11,498 00	27 00
19	Dubois	74	2,505 90	84 00	2,589 90	35 00
20	Elkhart	547	11,732 00	600 00	15,332 00	28 00
21	Fayette	121	2,655 00	10 00	2,665 00	22 00
22	Floyd	225	4,635 00	515 00	5,150 00	22 80
23	Fountain	276	8,917 00	1,432 00	10,349 00	36 66
24	Franklin	58	1,845 00	300 00	2,145 00	36 57
25	Fulton	166	4,395 00	90 00	4,485 00	27 00
26	Gibson	246	4,522 00	145 00	4,667 00	33 43
27	Grant	612	15,671 00	950 00	16,621 00	27 16
28	Greene	206	3,666 77	388 65	4,055 42	19 67
29	Hamilton	415	8,552 00	1,378 00	9,930 00	25 00
30	Hancock	268	5,308 75	873 49	6,182 24	23 06
31	Harrison	45	975 00	75 00	1,050 00	23 50
32	Hendricks	60	2,150 00	350 00	2,500 00	41 66
33	Henry	229	7,990 00	1,107 66	9,097 66	38 42
34	Howard	449	10,121 68	1,105 57	11,227 25	25 00
35	Huntington	362	8,788 0	423 00	9,211 00	25 44
36	Jackson	214	4,480 00	468 26	4,948 26	23 12
37	Jasper	188	4,028 25	300 00	4,328 25	23 02
38	Jay	286	7,135 50	525 00	7,660 50	26 45
39	Jefferson	163	5,310 00	800 00	6,110 00	37 48
40	Jennings	87	1,867 50	75 00	1,942 50	22 32
41	Johnson	323	5,620 00	117 80	5,737 80	19 07
42	Knox	244	5,800 00	800 00	6,600 00	27 05
43	Kosciusko	150	2,845 00	250 00	3,095 00	20 63
44	Lagrange	224	4,328 00	1,130 00	5,458 00	24 37
45	Lake	450	14,894 00	2,419 00	17,313 00	38 43
46	Laporte	356	6,268 00	150 00	6,418 00	18 03
47	Lawrence	187	3,900 00	1,050 00	4,950 00	28 95
48	Madison	987	23,690 00	2,252 00	25,942 00	26 28

COST OF COMMISSIONED HIGH SCHOOLS—Continued

Number.	COUNTIES.	Number of Pupils Enrolled in Township, Town or City Commissioned High Schools.	Total Amount Paid Teachers in Commissioned High Schools.	Total Amount Paid for Apparatus, Books, Furniture and Stoves (not including Janitor Fees).	Total Cost of Maintaining Commissioned High Schools	Average Cost per Pupil in Commissioned High Schools.
49	Marion	2 945	$83,434 00	$11,788 50	$95,222 50	$39 29
50	Marshall	92	2,619 00	223 00	2,842 00	30 90
51	Martin	34	845 00	50 00	895 00	26 32
52	Miami	371	7,325 00	318 00	7,643 00	20 60
53	Monroe	242	4,541 00	348 00	4,889 00	20 20
54	Montgomery	161	6, 45 00	282 00	6,727 00	41 80
55	Morgan	200	3,858 00	350 0	4,2'8 00	21 09
56	Newton	88	2,895 00	250 00	3,145 00	39 30
57	Noble	228	4,560 00		4,560 00	20 00
58	Ohio	54	1,480 00	50 53	1,530 53	28 34
59	Orange	60	1,320 00	120 '0	1,440 00	24 00
60	Owen	143	3,000 0'	1,082 00	4,082 00	28 55
61	Parke	91	1,590 00	150 00	1,740 00	19 12
62	Perry (None)					
63	Pike	74	1,820 70	51 14	1,87' 84	25 29
64	Porter	146	6,425 60	500 00	6,925 60	47 43
65	Posey	192	4,066 '0	385 00	4,451 00	23 18
66	Pulaski	72	1,185 00	24 00	1,209 00	16 80
67	Putnam	186	4,465 00	559 41	5,024 41	27 01
68	Randolph	216	4,629 78	658 68	5,288 46	24 64
69	Ripley (None)					
70	Rush	204	5,130 00	120 00	5,250 00	25 75
71	Scott (None)					
72	Shelby	163	3,780 00	100 00	3,880 00	23 80
73	Spencer	72	2,180 00	30 00	2,210 00	30 70
74	Starke	74	1,997 50	175 00	2,172 50	29 36
75	St. Joseph	456	13,203 00	880 43	14,08' 43	30 88
76	Steuben	80	1,200 00	50 00	1,250 00	15 63
77	Sullivan	112	2,404 46	100 00	2,504 46	22 36
78	Switzerland	62	1,446 75	2,049 19	3,495 94	56 38
79	Tippecanoe	498	11,900 00	1,065 00	12,965 00	26 00
80	Tipton	153	3,508 00	604 00	4,112 00	26 87
81	Union	125	2,966 11	1,051 75	4,017 86	30 55
82	Vanderburgh	715	20,250 75	2,009 84	22,260 59	31 13
83	Vermillion	144	3,080 00	390 00	3,470 00	24 23
84	Vigo	677	19,258 00	2,046 00	21,304 00	31 50
85	Wabash	504	8,560 00	1,250 00	9,810 00	20 78
86	Warren	58	1,420 00	50 00	1,470 00	25 34
87	Warrick	61	1,104 00	450 00	1,554 00	25 47
88	Washington	89	1,864 52	100 00	1,964 52	22 07
89	Wayne	865	16,237 00	1,128 00	17,365 00	20 00
90	Wells	146	3,200 00	500 00	3,700 00	25 34
91	White	268	5,733 00	894 33	6,6'7 33	24 73
92	Whitley	159	2,661 00	325 00	2,986 00	18 78
	Total	23,093	$570,803 90	$61,465 42	$632,269 32	$27 38

TEACHERS AND WAGES IN HIGH SCHOOLS.

Number.	COUNTIES.	Number Teachers Employed in Commissioned High Schools.	Number Teachers Employed in Noncommissioned High Schools.	Average Yearly Wages of Teachers in Commissioned High Schools.	Average Yearly Wages of Teachers in Noncommissioned High Schools.
1	Adams	5	3	$702 60	$429 00
2	Allen	11	8	1,081 42	309 47
3	Bartholomew	6	9	710 83	389 33
4	Benton	9	7	440 00	502 85
5	Blackford	7	2	532 85	381 25
6	Boone	11	2	532 72	360 00
7	Brown (None)				
8	Carroll	7	14	613 71	392 57
9	Cass	10	13	700 50	315 00
10	Clark	10	6	622 00	376 00
11	Clay	3	2	600 00	152 66
12	Clinton	9	8	683 00	402 62
13	Crawford				
14	Daviess		6		292 00
15	Dearborn	6	7	740 00	189 28
16	Decatur	9		602 96	
		5	9	700 00	248 50
17	Dekalb	12	5	883 00	385 60
18	Delaware	17	9	644 41	432 11
19	Dubois	6	4	417 65	305 31
20	Elkhart	20	9	736 50	407 22
21	Fayette	3	8	885 00	415 70
22	Floyd	6	3	772 50	452 00
23	Fountain	18	12	495 00	368 41
24	Franklin	3	5	615 00	430 00
25	Fulton	9	5	488 33	263 00
26	Gibson	8	12	565 25	495 23
27	Grant	21	7	746 23	427 14
28	Greene	8	2	458 34	240 00
29	Hamilton	21	11	407 23	409 63
30	Hancock	10	5	530 88	380 50
31	Harrison	3		325 00	
32	Hendricks	4	15	537 50	376 10
33	Henry	13	14	452 00	367 25
34	Howard	16	8	632 92	254 50
35	Huntington	14	12	627 71	414 83
36	Jackson	16	11	280 50	324 93
37	Jasper	8		503 53	
38	Jay	12	4	594 62	322 50
39	Jefferson	7	6	757 14	273 66
40	Jennings	3	7	623 33	346 15
41	Johnson	9	9	624 44	384 81
42	Knox	9	9	644 44	462 00
43	Kosciusko	4	14	711 25	364 28
44	Lagrange	11	10	393 45	309 80
45	Lake	23	1	647 56	400 00
46	Laporte	15	13	417 86	535 00
47	Lawrence	8	2	487 50	330 00
48	Madison	36	4	658 00	309 00

TEACHERS AND WAGES IN HIGH SCHOOLS—Continued.

Number.	COUNTIES.	Number Teachers Employed in Commissioned High Schools.	Number Teachers Employed in Noncommissioned High Schools.	Average Yearly Wages of Teachers in Commissioned High Schools.	Average Yearly Wages of Teachers in Noncommissioned High Schools.
49	Marion	96	14	$869 00	$483 21
50	Marshall	5	17	523 80	336 17
51	Martin	2	2	422 50	285 00
52	Miami	16	7	458 00	218 20
53	Monroe	7	. . . .	648 71	. . . .
54	Montgomery	12	14	537 00	472 75
55	Morgan	8	10	483 50	376 00
56	Newton	6	3	482 50	550 00
57	Noble	9	6	506 66	410 00
58	Ohio	2	. . . .	740 00	. . . .
59	Orange	3	3	440 00	500 00
60	Owen	5	5	600 00	292 00
61	Parke	3	6	530 00	348 25
62	Perry	. . . .	3	. .	490 00
63	Pike	4	1	455 17	360 00
64	Porter	9	7	713 95	616 31
65	Posey	9	3	451 77	566 33
66	Pulaski	3	8	395 00	244 84
67	Putnam	9	17	496 11	325 73
68	Randolph	8	11	578 82	358 36
69	Ripley	. . . .	7	. . . .	224 57
70	Rush	8	10	641 25	536 44
71	Scott	. . . .	6	.	277 16
72	Shelby	5	17	756 00	382 49
73	Spencer	4	3	515 00	317 33
74	Starke	4	1	499 38	125 00
75	St Joseph	18	7	733 50	401 58
76	Steuben	3	9	400 00	357 44
77	Sullivan	5	9	480 89	170 89
78	Switzerland	4	5	302 76	342 35
79	Tippecanoe	14	18	850 00	287 66
80	Tipton	8	4	438 50	339 25
81	Union	6	5	494 35	482 80
82	Vanderburgh	19	3	1,065 29	848 71
83	Vermillion	10	10	308 00	442 10
84	Vigo	24	3	802 40	523 33
85	Wabash	15	15	570 66	322 13
86	Warren	3	6	473 00	260 16
87	Warrick	3	3	368 00	404 83
88	Washington	4	6	466 13	262 41
89	Wayne	22	14	738 04	399 00
90	Wells	6	11	533 33	381 81
91	White	11	9	521 18	350 11
92	Whitley	6	7	443 50	437 43
	Total	899	661	$632 30	$377 10

AUBBEENAUBBEE TOWNSHIP HIGH SCHOOL, FULTON COUNTY.

A Rural High School.

Fig. 21.

6. Professional Training of High School Teachers.

The public high school as it exists today in America is largely the growth of the past sixty years. These schools have to a large extent supplanted the endowed academies and private schools that formerly constituted the only connection between the elementary schools and the college. Its development has been so rapid and complete that at the beginning of the twentieth century we find it a fundamental part of the system of public education in all our states.

The functions of the high school may be enumerated as follows:

1. It completes and symmetrizes the work begun in the elementary schools.

2. It seeks the safety of the state by extending to the more capable children of all classes those educational advantages that will result in the selection and training of leaders for intelligent service in academic, professional, and industrial life.

3. It opens the doors of the college, the technical, and the professional schools to capable boys and girls of slender means.

4. It supplies teachers and furnishes incentives to the elementary schools.

5. It seeks to maintain political equality and active sympathy among all classes.

6. It serves to extend among the mass of people the beneficent results of higher training and sound learning.

7. It seeks to implant in the minds of youth the fundamental notions of idealism and morality.

In making a study of the high schools of the country one will find that the weakest element in their work results from lack of trained teachers. A great majority of the teachers have received no professional training whatever. It has been too long held that teachers like poets are born, not made, and therefore any professional and technical instruction, or criticism of their work is super-

fluous. There seems to be a belief that by some mysterious process of mental alchemy college students may be transformed into successful teachers by sitting behind the instructor's desk. A young man does not become a practicing physician after taking a college course in physiology, or a lawyer after passing his examination in constitutional law; the state in both cases protects, alike, the young man from himself and the community from his inexperience. This sort of protection is not extended to the schools of the state, and high school students everywhere are sufferers from the well-meant but crude efforts of college graduates to gain experience, an experience that must be gained at the expense of their pupils. Hundreds of young teachers with high scholarly attainments enter our high schools with ambition to succeed, rejoicing in their opportunities for success; yet there is a constant procession of those who as failures abandon the profession simply because they never were taught the first principles of theory and practice, and of method in the work before them.

The secondary school is not merely the first four years of the college, nor is it an additional four years of the elementary schools. The secondary school of today fills a place in the education of the child that is untouched by the elementary school or the true college. The child enters the high school at from thirteen to fifteen years of age, and for the next four or five years passes through a distinct and vital period of his development. His training during this adolescent period presents new and vital problems that are not met in the primary or elementary schools, and which are not important in the real college.

With this psychological and new birth, new and distinct methods become imperative. The individual at this stage more than at any other time of his life, is susceptible to real culture and development. In most lives this is the time of natural dawn of the educational instinct. It is the waking time of life in both body and mind. It is now that we find "subtle emotions are setting into dispositions, and dispositions are becoming character." This is especially the period "when the great instincts of altruism begin to be felt and transform the soul, and there comes to the individual the great conception that life is after all not to be lived for self, but for others; there comes to the soul the instinct of subordination and sacrifice, of being ready to die for what we would live for."

In this period of the child's growth there is demanded of both parents and teachers a larger knowledge of his physical and psychical life than at any other time; here a broader knowledge of the child nature and the laws of his growth is imperative. Here, as well as in the kindergarten and the elementary schools, the teacher trained for his particular work is a necessity.

It is only during the last few years that there has arisen any serious question concerning the necessary qualifications of teachers in the secondary schools. So long as the only secondary school of consequence was the academy or college preparatory school, so long the only teacher worth considering was the college graduate. He who would successfully fit boys for college must himself know by experience what the college demanded. But with the growth of knowledge of the child's life, with an enlarged curriculum, and especially since the growth of the high school has introduced variety, not only in the subject of instruction, but in the purposes of the school as well, the former supply of teachers has proved inadequate. Unquestionably the lack of professional training and technical knowledge in the art of teaching, on the part of the average college graduate, had great weight in promoting the belief that a college education was not an essential pre-requisite for teaching in the secondary schools. In hundreds of cases the normal school graduate, the specialist and the elementary teacher who has made a reputation in school management have been selected for positions in the high school in preference to those with a liberal college training.

We may depreciate the situation as we will, it is nevertheless true that the college trained teacher without true professional knowledge has but a slight advantage in gaining admission to our secondary school. The college graduate has been carefully weighed these many years and too frequently found wanting. The specialist and the normal school graduate have also been tested and the popular verdict is that they, too, are often poor craftsmen. The educational welfare of the country demands that public opinion recognize higher standards of professional preparation. Those interested in the good of the school must know that "School keeping is not necessarily school teaching." The technical ability to teach includes both. "The art of teaching is mimicry and a dangerous gift" unless it is founded on the true science of life, which takes

into account the ends and means of education and the nature of the mind to be taught. "Graduates of colleges and normal schools must fail as teachers in the high school if they teach only as they have been taught." The methods of college professors are not always the best, and if they were, high school pupils are not taught or disciplined as college students are. The work of the secondary school is unique. It requires an arrangement and presentation of the subject matter of instruction in a way unknown in the elementary school and unheeded in most college teaching; it requires tact, judgment, and disciplinary powers peculiar to the management of youth.

In considering the question of the advanced training of teachers for the secondary schools we can not fail to take into consideration the problem of remuneration of the teacher. It is becoming harder, year by year, for the college graduate to find employment in the schools at a living salary. Granted that the number of positions annually falling vacant is relatively stationary, and that the number of applicants are annually increasing, but one result may be expected unless an increase of wages can be brought about. The law of supply and demand would seem to force the salaries down. In the majority of secondary schools of the country, little pecuniary inducement is offered to the intending teacher to take an advanced course in professional training. It may seem true that so lightly is higher professional training regarded in secondary schools that it is a question whether the average teacher who must depend on the usual salary can afford to spend the time and money necessary to the higher preparation for his work.

While we acknowledge the strength of this argument, we still contend that the great advantage of the trained teacher in the high school will be finally recognized. When the American people see that a thing is really worth having they know how to pay for it without grumbling. The better class of secondary schools over the country now pay fair salaries and insist on getting the ablest teachers. The very fact that the competition for these positions is disagreeably keen is the surest guarantee of a better system of training teachers for the secondary work. The earnest young teacher can not afford to compete, other things being equal, with those whose preparation has been less expensive and less complete than theirs; the only hope of the ambitious college graduate is to

put himself distinctively above his competitors in the field of his chosen work. This fact furnishes the opportunity for the teachers' college and the school of pedagogy in the university. It is precisely this condition of affairs which makes possible for the first time in America a serious consideration of ideal methods for training teachers for secondary schools.

The Committee of Fifteen have said that "One-sixth of the teachers in the United States are engaged in secondary work and in supervision. These are the leading teachers. They give educational tone to the communities as well as inspiration to the larger body of teachers. It is of great importance that they be imbued with the professional spirit springing from sound professional culture. The very difficult positions which they fill demand ripe scholarship, more than ordinary ability, and an intimate knowledge of the period of adolescence."

During the sixty years of the existence of the normal school in America, its influence on the educational methods and thoughts of the country has been beyond estimate and its growth phenomenal. According to the latest educational report of the National Bureau of Education, 69,593 students were in attendance at the different normals and training schools of the United States. The excellence and thoroughness of the work in most of these schools have always made them centers of educational thought in our country. That these institutions have as yet failed to provide an ideal preparation for all classes of teachers is largely due to the fact that they have in nearly all cases disregarded some of the most fundamental principles of professional training which were so ably set forth by Commissioner Harris in his article on "The Future of the Normal School." The most obvious of these defects is the failure to differentiate the work they have attempted. The result of this failure is that all students, irrespective of the part they are to take in the profession, are trained side by side. The same course is supposed to train teachers to become city superintendents, county superintendents, principals and teachers at high schools, elementary teachers, primary teachers, and teachers in normal schools and colleges. It is certainly plain that the qualifications and equipment needed for teachers in these various positions are different in a very large degree.

Entrance to One of Fulton County's Township High Schools.

Fig. 22.

The great advance made in educational methods during the past twenty years surely warrants us in saying that a new era in the problem of training teachers is beginning, resulting first from the demand of public opinion for a higher class of trained teachers in all departments of the school, and secondly, from the recent movement of colleges and universities in establishing professorships of education. It is evident to all students of educational processes that the method of instruction and the organization of the work of training teachers should vary according to the grade of education in which the student expects to work. Commissioner Harris, in the article above referred to, says: "There is one method for the higher education and another for the elementary. Within each of these there should be a further discrimination of methods, so that five stages of method will be noted." These five he enumerates as the method of the kindergarten, of the elementary school, of the secondary school, of the college, and of the university. Speaking of the work which will be required of the future normal school and the department of education in the university, he says: "The student will be taught how to present a branch of study symbolically according to the method of the kindergarten; by typical facts as in the elementary school; scientifically as in the secondary school; comparatively as in the college; as a specialist would investigate it in the post-graduate course."

In France there are three classes of normal schools and the prospective teacher enters one or the other according to his intention of becoming a teacher in the elementary schools, a teacher in the secondary schools, or a teacher of teachers. The first of these normal schools trains those who are to be teachers of boys and girls under the age of fifteen. Eighty-nine of such normals have been established for young men and eighty-six for young women in France and the French colonies. For the training of instructors in these normal schools two special schools have been established, one for men and one for women. Here the subjects taught in the elementary schools are studied with a special reference to the needs of those who are to become a teacher of teachers.

The normal school for the training of teachers for positions in secondary and higher institutions of learning is at Paris. In this school there are approximately one hundred students who are chosen by competitive examinations, open only to those who hold

the bachelor's degree. At the end of the first year of the course all students are required to pass the examinations for the master's degree. In all these normal schools courses are given in philosophy, psychology, history and principles of education, and during the last year of the course much time is devoted to observation and practice teaching under skilled critic teachers.

In Germany's experience we find an illustration of the truth that for the true high school teacher "to liberal scholarship must be added special scholarship, and to special scholarship professional knowledge, and to professional knowledge technical skill." There the intending teacher in the secondary schools must first of all be a graduate of a secondary school; he must also hold a degree from the university; he must then obtain a certificate from a state board of examiners. But this certificate confers no right to teach. Something more than culture and scholarship is required. The applicant must have taken a course in philosophy, ethics, logic, psychology, and in the history and principles of education, and have spent one full year in the teachers' seminary, where he is trained in special methods of presenting the subjects which he expects to teach, in practice teaching under guidance, and in familiarizing himself with practical workings of a secondary school. It is safe to say that Germany owes more to the professional training of her teachers and their strong professional spirit than to any other factor in her educational system.

When taking up the study of this question your committee addressed a letter of inquiry to about sixty leading educators of the United States containing the following questions:

1. In addition to the regular collegiate course, or its equivalent, what professional training should be required of applicants for high school positions?

2. How can this training be given by colleges?

3. How can this training be given by our normal schools?

4. How can this training be given by our city training schools?

5. What requirements as to professional training are made of applicants for high school positions by the Board of Education of your city?

Fifty-one answers were received to this letter. In answer to the first question, forty-two said that in addition to the regular college

course, one or more years of strictly professional character covering the work of the high school should be required.

Of these forty-two answers, twenty-one insisted that one-half year or more should be given by all students to the observation of good high school work and practice in actual teaching under skilled critic teachers. Among those favoring the requirement of the practice work were the following: Charles Degarmo, Cornell University; Elwood Cubberly, Leland Stanford; F. Truedley, Youngstown, Ohio; George P. Brown, Bloomington, Ill.; J. F. Millspaugh, Minnesota State Normal; Edwin B. Cox, Xenia, Ohio; G. Stanley Hall, Clark University; Henry Wittemore, Massachusetts State Normal; J. M. Greenwood, Kansas City; W. N. Hailmann, Dayton, Ohio; Paul H. Hanus, Harvard University; Sam. T. Dutton, Columbia University; Arthur C. Boyden, Massachusetts State Normal; S. T. Dial, Lockland, Ohio; C. B. Gilbert, Rochester; C. A. McMurray, Bloomington, Ill.; Francis W. Parker, Chicago; H. S. Tarbell, Providence, R. I.; L. H. Jones, Cleveland, Ohio. Twelve of these forty-two made the specializing in the subject the candidate expects to teach, in addition to the usual college course, a very important requirement.

In the second question the general answer was that the colleges and universities could furnish opportunities for the preparation of high school teachers by the establishment of schools of pedagogy for graduate students. In order to provide for the observation and practice work provision would necessarily have to be made for cooperation with the public high school in the vicinity of the college where students could do work under skilled direction.

The answers to the third question were nearly uniform and to the effect that this work could not be done by the normal school as generally organized. But it would require the establishment in these schools of special departments for intending high school teachers who have completed the regular course in the college or its equivalent, and the establishment of practice school facilities.

Concerning the fourth question the answers were uniform to the effect that the city training school could not practically do this work owing to the small number of teachers required and the large cost of maintaining a special school for this work. This plan was tried for a time at Providence, R. I., and at Brookline, Mass.

The answers to the fifth question were to the effect that no city from which an answer was received had any uniform requirement in regard to the professional training of high school teachers. Most of the cities require that the candidates have a college education or its equivalent, and many of them that they should have specialized in the branches they are to teach. Two answers held that professional training for elementary work and successful practice therein were a good preparation for high school teachers.

What, then, is the ideal preparation to be expected of high school teachers? The lowest requirements we can consistently demand would include four elements: (1) General academic culture. (2) Special academic training in the subjects the candidate expects to teach. (3) Theoretical professional training. (4) Practical training in the art of teaching.

First. General culture. Six years ago the Committee of Fifteen said that "the degree of scholarship required of the secondary teacher is by common consent fixed at a college education. No one, with rare exception, should be employed to teach in a high school who has not this fundamental preparation." The culture gained by a four years' course in advance of the grades to be taught is not too much to demand. The inspiring influence that comes from a well developed manhood or womanhood taught to view the subjects of the secondary school in a comparative manner, and trained to see the relationships existing in the various spheres of knowledge, is a force that the managers of a high school can not afford to neglect.

Second. Special training in the subjects to be taught. The fact that a high school teacher must in some degree be a specialist is generally recognized. In addition to the usual college course, the applicant should have specialized one or more years either during his college course or in the post-graduate courses of the university in the subjects he expects to teach. Mr. Russell, of Columbia University, in his article on the "Training of Teachers for Secondary Schools," says: "The strongest argument that we can use against the average college graduate is that he has nothing ready to teach. This argument applies with even greater force to the normal graduate, however well he may be equipped on the professional side. Neither liberal culture nor professional skill can at all replace the solid sub-stratum of genuine scholarship on which

all true secondary education rests. No one who knows the scope, purpose, and methods of collegiate instruction, no one familiar with the work of the average normal school, will for a moment say that such training necessarily gives any remarkable degree of special knowledge. Special scholarship is an absolute necessity to qualifications for secondary teaching. Without it the teacher becomes a slave to manuals and text-books; his work degenerates into a formal routine with no life, no spirit, no educative power."

Third. Theoretical professional training. The Committee of Fifteen outlined the course in the science of teaching for the secondary teacher to include psychology in its physiological and experimental features, methodology, school economy, history of education, and philosophy of education. The true teacher must know the nature of mind. He must understand the process of learning, the formation of ideals, the development of the will, and the growth of character. The secondary teacher should have had such a course in professional work as will enable him to view his own subjects and the entire course of instruction in their relation to the child and society. "A teacher may be able to teach the subject ever so well, may have the reputation of being a distinguished educator, yet through his whole life may be a teacher of Latin or Physics or History, rather than a teacher of children." The secondary teacher needs to know the psychology of the adolescent period, in particular. This is that important time in a child's life which we know as the period of beginnings, the beginning of a more generous and ambitious life, a period having the future wrapped up in it; a transition period of storm and stress, in which egoism gives way to altruism and the social, moral and religious feelings bud and bloom. To be a guide of youth in this formative state requires a nature both deep and sympathetic, and a knowledge and insight into the deeper nature of child life.

Fourth. Practical training in the art of teaching. The special training for the actual work of the schoolroom is of primary importance. It is safe to say that no quality is so absolutely desired in the teacher as the technical ability to teach. After the question relating to general culture, special and professional knowledge have been answered, there comes the all-important question that must be asked of every candidate—"Can he teach?"

This training in the art of teaching should include both observation and practice. In all real training schools for secondary teachers, students must be required to observe true high school work until they have become saturated with its spirit. They must also be given large opportunity o do practice teaching under the guidance of skilled critic teachers.

Many of the larger colleges and universities of our country have within the past few years recognized the importance of professional training of college graduates for teaching in high schools and colleges and have established post-graduate courses in educational work to meet this need. A few of the best normal schools have also sought to meet this demand, and have established regular courses, in which college graduates may do a high grade of professional work. In most instances, however, both the normal schools and the colleges have failed to afford opportunities for regular practice work in high school teaching. In many cases they provide ample opportunity for observation, but omit entirely the practice work.

In Harvard Pedagogical School arrangements have been made with the neighboring high schools whereby graduate students, before completing their course in professional work, may not only observe high school work, but do actual teaching under skilled critic teachers. In Brown University we understand that graduate students in the pedagogical department may teach half the time in the Providence High School under skilled supervision. The Columbia Teachers' College affords opportunities to all students for both observation and practice work. The high school at Brookline, Mass., under Superintendent Dutton, arranged to give graduate students from Wellesley College opportunities for observation and practice under critic teachers. We understand that a few of the state normals in the East have offered similar advantages to students preparing for high school teaching.

The Indiana State Normal School attempts to do four things in order to aid the student wishing to engage in high school work in their preparation:

1. The course of study affords to the students a fairly adequate opportunity to study the different branches taught in the high school, and to specialize upon them.

2. In the practice work the students who are to enter upon teaching in the high schools are given more extended observation and practice in grades seven and eight than in the lower grades. This enables them to have a very clear notion of the condition of students entering the high schools.

3. By an arrangement with the city school board and the superintendent of the city schools, such students are assigned for observation in the Terre Haute High School. This observation is both general and special; that is, they observe the work of the different departments in general, and give special observation in the department for which they are preparing.

4. These students at the end of the work in observation make a specific report to the head of the professional department as to courses of study, methods and presentations, etc., as found in the high schools.

The Indiana University offers courses in psychology, philosophy and pedagogy in educational work which it would require several years' study to complete. Some of these are designed especially for intending high school teachers and give in compact, separate, practical form such a survey of principles, methods, and organization in secondary education as is deemed necessary. The following statements of these special courses are taken with but slight alteration from their catalogue:

1. Special courses in high school pedagogy. High school pedagogy, lectures, reports, recitations. The following topics are treated: High school management, including hygiene; the organization and function of secondary schools in different countries; the general history of secondary education; the history of methods; the psychology of adolescence; the reports of the Committee of Ten and the Committee on College Entrance Requirements, with related literature.

2. Teachers' courses in the different departments. Most of the departments whose subjects are represented in high schools offer teachers' courses in which the methods of teaching such subjects are discussed and illustrated.

3. Conferences on secondary education. Lectures on the methods of teaching the subjects in the high school curriculum are given by the professors of the different departments of the university concerned.

4. Observation and apprentice courses. Each student taking this work will teach not less than two weeks as an apprentice in some high school to be agreed upon, and will also visit and prepare a written report upon the work in at least four other high schools.

In these schools opportunities for full and sufficient practice work are not yet provided. But the indications all point one way. The outline of work in the high grade professional school of the future, in which high school teachers are to be trained, must include in addition to the usual curriculum in special studies, full opportunities for observation and practice in high school classes under trained supervision.—From Report of Committee Representing the Indiana Council of Education, Supt. T. A. Mott, Chairman.

7. Township High Schools.

(a) GENERAL STATEMENT.

The greatest activity in high school circles during the last two years has been in the townships. The new transfer law has promoted high schools, while the new high school law has improved them in quality. It is now required as a prerequisite that there shall be at least twenty-five common school graduates of school age residing in the township. This last law checked the organization of small high schools throughout the state incident to the attempt to defeat the transfer law. In nearly every case new high schools are now organized only where the demands are strong and the conditions favorable. We have in townships:

Township high schools	502
Township high school pupils	10,253
Township high school teachers	600
Township high schools outside of villages, towns or cities (strictly rural)	65

(b) THE TOWNSHIP HIGH SCHOOL LAW.

[1901, p. 514. Approved March 11, 1901; in force May, 1901.]

The School Trustees shall take charge of the educational affairs of their respective townships, towns and cities. They shall employ teachers, establish and locate conveniently a sufficient number of schools for the education of the children therein, and build, or otherwise provide, suitable houses, furniture, apparatus and other articles and educational appliances necessary for the thorough organization and efficient management for said schools. Such School Trustees may also establish and maintain in their respective corporations, as near the center of the township as seems wise, at least one separate graded high school, to which shall be admitted all pupils who are sufficiently advanced: Provided, That the School Trustees of two or more school corporations may establish and maintain joint graded high school[s] in lieu of separate

McKinley School, Three Miles East of Rochester, Ind.

Three teachers, 120 pupils; Cost $8,000. Rural Township High School.

Fig. 23.

graded high schools, and when so done they jointly shall have the care, management and maintenance thereof: Provided further, That any Trustee, instead of building a separate graded high school for his township, shall transfer the pupils of his township competent to enter a graded high school to another school corporation: Provided further, That all payments of tuition, provided for under this act, heretofore made by School Trustees for such high school privileges are hereby legalized: Provided further, That no such graded high school shall be so built unless there are at the time such house is built, at least twenty-five common school graduates of school age residing in the township.

(c) STATISTICAL INFORMATION ON TOWNSHIP HIGH SCHOOLS.

Number.	COUNTIES.	Number of Township High Schools in County.	Enrollment in Township High Schools.	Number of Teachers in Township High Schools.	Number of Township High Schools Outside of Cities, Towns and Villages, in the Open Country.
1	Adams	4	35	4	
2	Allen	10	250	10	
3	Bartholomew	8	113	9	2
4	Benton	6	100	6	3
5	Blackford	2	30	2	
6	Boone	3	43	3	
7	Brown (None)				
8	Carroll	8	170	12	
9	Cass	8	135	8	
10	Clark	5	120	5	
11	Clay (None)				
12	Clinton	5	113	8	
13	Crawford	1	18	1	1
14	Daviess	6	48	6	
15	Dearborn (None)				
16	Decatur	9	83	9	
17	Dekalb	1	26	1	
18	Delaware	11	150	13	5
19	Dubois	2	40	2	
20	Elkhart	7	115	6	
21	Fayette	6	112	6	
22	Floyd	1	16	2	1
23	Fountain	12	205	12	1
24	Franklin	6	33	6	
25	Fulton	8	205	10	3
26	Gibson	11	250	10	1
27	Grant	2	25	2	
28	Greene	4	75	6	
29	Hamilton	9	340	20	1
30	Hancock	8	243	14	1
31	Harrison (None)				
32	Hendricks	12	246	15	2
33	Henry	9	136	11	1
34	Howard	7	75	7	1
35	Huntington	10	256	11	3
36	Jackson	9	81	9	
37	Jasper (None)				
38	Jay	4	105	6	
39	Jefferson	6	92	6	1
40	Jennings	6	148	7	
41	Johnson	7	190	9	3
42	Knox	7	210	7	
43	Kosciusko	6		6	
44	Lagrange	11	220	11	1
45	Lake	1	72	3	
46	Laporte	9	792	9	
47	Lawrence	2	40	2	
48	Madison	1	12	1	

STATISTICAL INFORMATION ON TOWNSHIP HIGH SCHOOLS—Cont.

Number.	COUNTIES.	Number of Township High Schools in County.	Enrollment in Township High Schools.	Number of Teachers in Township High Schools.	Number of Township High Schools Outside of Cities, Towns and Villages, in the Open Country.
49	Marion	13	326	18	1
50	Marshall	5	96	6	1
51	Martin (None)	. . .	. . .	. . .	. . .
52	Miami	13	150	13	. . .
53	Monroe	3	35	3	. . .
54	Montgomery	9	133	12	1
55	Morgan	. . .	208	10	. . .
56	Newton	3	90	5	. . .
57	Noble	6	113	6	. . .
58	Ohio (None)	. . .	. . .	. . .	. . .
59	Orange (None)	. . .	. . .	. . .	. . .
60	Owen	5	33	5	. . .
61	Parke	3	35	4	. . .
62	Perry (None)	. . .	. . .	. . .	. . .
63	Pike	11	34	7	. . .
64	Porter	6	125	7	1
65	Posey	4	125	6	. . .
66	Pulaski	4	166	9	. . .
67	Putnam	15	360	15	2
68	Randolph	6	89	7	. . .
69	Ripley	3	24	3	. . .
70	Rush	11	174	14	2
71	Scott	3	92	3	. . .
72	Shelby	19	225	19	3
73	Spencer	3	75	3	. . .
74	Starke (None)	. . .	. . .	. . .	. . .
75	St. Joseph	3	30	3	3
76	Steuben	6	126	6	1
77	Sullivan	6	183	6	. . .
78	Switzerland (None)	. . .	. . .	. . .	. . .
79	Tippecanoe	16	302	18	4
80	Tipton	5	128	6	. . .
81	Union	5	55	5	3
82	Vanderburgh	. . .	. . .	. . .	. . .
83	Vermillion	6	125	9	1
84	Vigo	2	40	2	. . .
85	Wabash	6	187	11	. . .
86	Warren	1	15	1	. . .
87	Warrick	5	75	5	. . .
88	Washington	6	176	7	2
89	Wayne	10	246	12	1
90	Wells	5	91	7	4
91	White	5	126	9	2
92	Whitley	5	72	5	2
	Total	502	10,253	600	65

(d) SPECIAL ILLUSTRATIONS OF TOWNSHIP HIGH SCHOOLS.

The following illustrations, giving cuts, courses of study, history, teaching force and other items of interest are intended to show a few good township high schools—not that they are necessarily the best in the State. These illustrations might be extended indefinitely in number. Nearly every county in Indiana has one or more townships which provide for their high school pupils fully as well as those given in the illustrations. Attention is called, particularly, to the fact that nearly all of these schools are distinctly rural; that is, they are located in the open country or in very small villages. This makes school work in the country attractive and efficient.

TOWNSHIP HIGH SCHOOL, LAURAMIE TOWNSHIP, TIPPECANOE COUNTY.

(See Fig. 19.)

Fig. 1 shows one of the township graded and high school buildings of Lauramie township, Tippecanoe county, Indiana. The building was erected by Trustee Almon F. Yeaman and completed during the summer of 1902, at a cost of about $18,000. This is probably the best school building in Tippecanoe county outside of Lafayette. It is an imposing structure inside and out—not ornamental, but impressive—the interior, in fact, being more complete and imposing than the exterior. Its width is 76 feet, its length 84 feet.

It is built of Danville pressed brick, and the trimmings, including the entire front entrance, are of stone. The large basement, with cement floors beneath the entire building, is devoted to two large play rooms, one for each sex, two large furnace rooms, and two rooms containing the dry closets and urinals. The height of the basement is 10 feet; of the first story, 13 feet; of the third story, 13 feet 6 inches. The building contains six rooms, each 26x32 feet, and a large auditorium 32x60 feet.

The walls of these rooms are artistically finished in cream-colored tints with a ceiling of light blue. The floors have been laid with special care. They are of rip-sawed yellow pine, planed, oiled and laid above a blanket of sea grass.

The cloak rooms of each schoolroom are 7x18 feet 9 inches.

The framing lumber used is of long-leaf yellow pine and the finishing lumber of Louisiana cypress. The wainscoting is golden oak.

The building is heated and ventilated by four furnaces furnished by Kruse & DeWenter Co., of Indianapolis. Warm air is let into the room above the heads of the pupils and taken out at the floor, the entire air being changed every three minutes.

The windows are so arranged that the light is admitted to the left hand of the pupils and to the rear.

The school building is used by the people of Clarks Hill and vicinity—pupils in some cases driving five or six miles to obtain high school privileges. At present five teachers are employed. They are Miss Mary Casey, primary, first and second years; Miss Ida Williams, third and fourth years; Miss Nelle Anderson, fifth, sixth and seventh years. Prof. J. D. Porter, principal, and Miss Alida Cunningham, assistant, have charge of the high school work and the eighth grade. Professor Porter is a graduate of the State Normal and a student in Indiana University, and has had several years' experience as teacher and principal. Miss Cunningham is a graduate of Purdue University, and has taught in college and high schools. Professor Porter has charge of the Latin and history work, Miss Cunningham of the mathematics.

The school, which has been without proper facilities for work during the past three years, opened this year in splendid shape and gives promise of being prosperous for years to come. There are now enrolled 195 pupils, an average of thirty-nine to the teacher. There are fifty-five pupils in the primary room, thirty-seven in the second room, forty-two in the third room. There are thirty-three pupils in the eighth grade and twenty-eight in the high school. Of the high school nine are first year, seven are second year, seven are third year and five are high school graduates reviewing and doing fourth year work.

The Clarks Hill high school uses the county three year high school course, which has been adopted by the county board of education for the sixteen township high schools of this county.

The course is given below:

TIPPECANOE COUNTY HIGH SCHOOL COURSE—Three Years.

Year	Term					
I	1st half	Algebra	English and Composition	Physical Geography	Book-keeping	Latin
	2d half	Algebra	English and Composition	Physical Geograhpy	Book keeping	Latin
II	1st half	Algebra	Rhetoric and Composition	General History	Civil Government	Latin
	2d half	Algebra	Rhetoric and Composition	General History	Geometry	Latin
III	1st half	Arithmetic	Literature and Composition	General History	Geometry	Latin
	2d half	Arithmetic	Literature and Composition	General History	Geometry	Latin.

Music throughout course.

Pupils are graduated on completing the three years' work and given county high school diplomas.

In addition to the above course, there is arranged a fourth year of work for the high school graduates who wish to return. These have physics or botany, Latin, solid geometry, literature or other suitable subjects.

In working the above course college requirements are considered but they are not allowed to determine the entire work. Pupils are required to complete elementary algebra through quadratics; to complete plane geometry; to master the elements of Latin; to become proficient in English; to get a general view of general history. In this we aim to advance the pupil so that if he desires to enter college he may get credit for the work done. Pupils are able to take up higher algebra, solid geometry and Caesar, and are proficient enough in grammar and rhetoric that they can do superior English work. In civil government the pupils study the constitution by Townsend. The object is to give them something definite, though possibly difficult, rather than such indefinite subjects as the township, county, etc. In some of the schools, as Clarks Hill, the pupils do very good work in Latin, reading one or two books of Caesar and Cicero of Virgil.

While proper attention is thus given to college requirements the fact is recognized that the majority of high school pupils do not enter college. This has lead to the introduction of such subjects as arithmetic, physical geography, English grammar and bookkeeping. Our fourth year work in high school often consists of a normal course in the common branches. This normal work is especially appreciated by those preparing to teach and is productive of a high grade of scholarship in the applicants for teachers' license. Bookkeeping is an elective study. The purpose of this is not to give a complete course in the subject or to produce bookkeepers. The aim is to give the pupil knowlege of business transactions to enable him to meet the requirements of every day life.

The Clarks Hill school uses the high school texts adopted by the county board:

Algebra—Milne.
Physical geography—Eclectic.
English—Whitney.
Civil government—Townsend.
General history—Meyers.
Rhetoric—Lockwood.
Geometry—Wentworth.
Arithmetic—Indiana advance book.
Music—Gantvoorts.
Latin—Harkness, and Junior Latin book.

In the high school and eighth grade of the Clarks Hill school there are now sixty-one pupils.

The expense for teachers in these grades will be for a seven months' term about $1,000. This makes the per capita cost of the high school pupils about $17 for the term. The enrollment and attendance in the township high schools of this county show that their value is understood and appreciated by the public. Last year 302 high school pupils were enrolled in the county. Lauramie township, which has two prosperous high schools, Clarks Hill and Stockwell, enrolled fifty-three pupils. Another township, a small one, enrolled fifty-eight high school pupils. Last year

there were thirty-nine high school graduates in the county. The present indications are that next year Laramie township will graduate about twenty from the high schools. The graduates are given diplomas in most cases appropriately framed.

DEPARTMENTAL WORK.

In many of our graded and high schools departmental work is carried on with success. In this way such special subjects as music, drawing, and penmanship can readily be undertaken. In several of our graded schools the trustee selects a teacher who, in addition to the regular requirements, is proficient in music. This teacher then does all the music work, going from room to room, the regular teachers of such rooms taking certain work from the music teacher's room. This work has been most successfully done at our Dayton, Romney and Battle Ground graded schools. I see no reason why free hand drawing could not be as successfully undertaken.

Again there is no reason why an appropriate course in manual training could not be introduced into our township high schools with every assurance of success. The latest school buildings usually have basement rooms that could be fitted up for work shops and drawing rooms. In our townships since this could not be carried into every district building, it would have to be limited to our high schools and high school pupils. A complete course in bench work should be one feature; a simple course in wood turning might be another, depending upon the availability of motor power; work in iron would doubtless have to be omitted with probably the exception of some forge work. These lines of work, together with mechanical drawing would, without doubt, attract and hold many of our boys through high school. The item of expense would not be so great or terrifying. After the work benches were placed in the building, the price of two expensive charts would purchase the necessary tools for a course in bench work. I feel sure that with proper care in the selection of teachers, this departmental work will materially increase the efficiency of our township high schools.

IMPORTANCE OF TOWNSHIP HIGH SCHOOLS.

It is hardly possible for one not actively engaged in the work, and a careful student of this problem, to estimate the importance of our township high schools. Admitting that these schools have their deficiencies, that circumstances are often such that full justice can be done neither to the pupil nor to the course of study, yet when all is said these schools have brought home to the people educational advantages never before equaled.

I have been intimately acquainted with the educational work of one township for twenty years. Before the advent of these high schools, it is a conservative estimate to say that, with the exception of a few wealthy people whose children were sent to college, there was not an average of five pupils yearly sent away to do high school work.

In 1900 this small township, with a total enrollment of but 313 pupils, had a high school enrollment of fifty-eight.

A Model Two-room School Building at DeLong, Ind.

One of Fulton County's Good Township Schools.

Fig. 24.

There are three small villages, and each has its high school. The efficiency of the work varies, circumstances at times making it below par and discouraging. At other times the work attains to a degree of excellency not surpassed anywhere. But whatever the results of the work itself, we feel that our high school pupils are benefited by being in school three years in contact with the best teachers of the county. Our high school teachers are men and women of ability. Several are college graduates, and all have had more or less work at normal schools and colleges. They bring to our pupils at the impressionable age of fifteen to eighteen a broad scholarship, high ideals of thought and correct ideals of life.

E. C. CRIDER, County Superintendent.

CLEAR CREEK TOWNSHIP HIGH SCHOOL, HUNTINGTON COUNTY, IND.

(See Fig. 20.)

Clear Creek township is six miles square, the civil and congressional township being identical. The surface is generally undulating, being drained by two large creeks and a number of smaller ones. The soil is very fertile. There are a number of good gravel deposits in the township, and because of easy access to these the roads are nearly all graveled.

Prior to the erection of the high school building there were nine school buildings situated in the regular and geographical positions. The earlier schoolhouses prior to the '50's were, of course, of log structure. About this time or a little later they were replaced by frame buildings. Since the '80's these frame houses were replaced by good, substantial brick buildings.

A course of study was made by County Superintendent M. B. Stults in 1879 and used by his teachers, continuing through his term and those of his successors. The pupils had been thoroughly graded, and quite a number were graduates from the district schools at an age much younger than the pupils of that day were in the habit of leaving their school work. Thus there began to grow a sentiment for higher educational opportunities.

Superintendent McNally was a very strong man, educationally; he advocated, very strongly, the idea of township high schools. He was succeeded in June, 1885, by A. D. Mohler, a very competent superintendent, who agreed with Superintendent McNally that the country children should have the same high school privileges, or as nearly as possible, as the city and town children. James M. Purviance, who was trustee of Clear Creek township during Mr. Mohler's administration, was very much in sympathy with the idea, and he and Mr. Mohler made a plan for a high school at the center of the township. This was a new idea to the people and, of course, met with a great deal of opposition. In June of 1887 Mr. Mohler was succeeded by Superintendent Oliver Kline, a competent and conscientious superintendent, who also carried forward and urged this same idea of township high schools. In 1888, Mr. Purviance, who was yet Trustee, decided that he would build an additional room at the center and give the pupils of his township the advantage of high school education. The school house was completed in the fall of 1888. They had a great deal of opposition to overcome, and in order to have a sufficient number in the high

school to make it look worth the while to hire a high school teacher, the eighth grade pupils were permitted to attend this school.

The high school course at this time, as nearly as I can ascertain, was as follows:

First Year—Grammar advanced arithmetic, physical geography and civil government.

Second Year—English literature, algebra, general history, zoölogy one-half year, bookkeeping one-half year.

This course gradually developed into a three and four years' course, respectively. In 1890 and 1891, the following two years were added to the course:

Third Year—American literature, geometry, algebra and botany.

Fourth Year—Review of advanced arithmetic, geology, physics and chemistry.

This course in turn has been slightly changed until we now have the following course:

Freshman Year—Algebra, composition, general history, physical geography.

Sophomore Year—Algebra, English literature and composition, general history, botany or zoölogy.

Junior Year—Plane geometry, American literature and composition, Latin or German and physics or chemistry.

Senior Year—Solid geometry, civics, Latin or German and agriculture or bookkeeping.

In the spring of 1901, an architect condemned the old building as unsafe, and the County Superintendent condemned it as unsanitary.

A. W. Colclesser, the present Trustee, is a thorough school man and had been teaching up to the time of his election. He was very much in favor of the idea of concentration. He truly and honestly believed that it was not only the best but the cheapest way to educate the children of the township.

This was a new idea, at least to a certain extent, to a large majority of the people of the township. The Trustee held meetings in all of the districts to discuss the advisability of building a school at the center to accommodate the pupils of the township. These meetings were well attended and the idea of concentration hotly contested, the majority being opposed to the idea, but a minority very favorable.

The Trustee, after consulting with the County Superintendent and his Advisory Board, decided to build a six-room building, although he was opposed by the majority of the people of his township. The Advisory Board were men of good judgment and public spirited. This building was completed in the fall of 1901.

In 1893, the present Superintendent was teaching in this township high school. He believed that a more wholesome social condition should prevail among the pupils throughout the township and, at the same time, an interest in higher education. At a township institute, he suggested the idea of a common school alumni association for Clear Creek township. The teachers all approved of the idea. A meeting of the graduates was called prior to this time and an association formed. Their constitution and by-laws permitted the County Superintendent, Trustee, and the teachers

to be honorary members, thus having a slight supervision over their meetings. Meetings have been held once each year at which good and interesting programs and banquets have been given.

A great many pupils of the township, hearing the older ones talk of the interesting meetings of the alumni, caught the inspiration and looked forward to the time when they might be members. This, I am sure, caused a large number of the pupils to do much better work in the grades.

Some four or five years ago the high school teachers and the pupils of the high school, and former graduates, formed a society known as "The Clear Creek Township High School Aid Society." In this society, the County Superintendent, Trustee, and the teachers of the township are considered members. The purpose of this society is two fold: first, to keep alive among the people, and especially among the younger ones, the idea that the township high school is not only a privilege but a necessity to the highest attainment of its citizens; second, to hold meetings, such as socials, ice-cream suppers, and give lecture courses, whereby the society could realize a profit; this money to be expended for something that would better equip the high school, such as apparatus, books, etc.

The County Superintendent, Trustee, and the Principal of the high school are ex-officio members of the committee to decide what is the most profitable investment. This society has done very much to create a sentiment for higher education. The young people, realizing that there is a work for them to do, have never hesitated to do all that is in their power. The school now has sixty high school pupils with two teachers in the high school.

The new schoolhouse is a well arranged six-room building, with two of the rooms on the upper floor thrown together for a high school hall. This hall has a large stage, well furnished. Here all the meetings of the societies above spoken of are held. In our course of study, we have a regularly outlined course of literary work; some one section of the high school reports on each Friday afternoon. These exercises are often held in the hall. The hall has a seating capacity of about 400.

This building is one of the best heated, lighted, and ventilated that modern architecture can provide. A. D. Mohler, the architect, is noted for his care in hygienic conditions and taste in architecture.

This school was built with the idea of concentration, but so far none of the schools have consented to be conveyed to this place, although, in talking with a patron a few days ago, I was somewhat surprised and pleased to hear the statement: "There will be no school in district No. — next year; the pupils will be conveyed to the central building."

The intention of the school officials in building this large building was, first, to give an opportunity to the young people of the township for a higher and broader view of life through the increased advantages that they would receive in attending a school of this kind; second, to add, gradually, industrial training to the school work, also, to bend the course of study, and more especially the sciences toward agricultural lines; that is, we do not expect to try to teach agriculture from a scientific point of view or to take the place of an agricultural college, but on the other hand, take botany for an illustration, instead of being satisfied with plucking the flower and picking it to pieces and naming and drawing its parts, we shall

also be concerned and interested in its life; that is, where it grows, how it grows, and in what kind of soil and under what conditions it reaches its highest development.

From this on, the County Superintendent will, each year, prepare questions directing the observation of the pupils during the summer months. These questions will be given to the pupils at the close of a term of school, and they will be expected, during the summer, to make observation and notes according to the nature of the questions. These questions will be taken up the next year in school and discussed by teachers and pupils. This will lead to a closer observation of nature by the pupils.

Although this township high school is six miles from any city or town, it is the largest high school in the county, outside of the city of Huntington.

H. D. SHIDELER, County Superintendent.

Township School—Two Rooms. District No. 8, Black Township, Posey County, Indiana.

The best two-room Rural School building in Indiana.

Fig. 25.

IX. The Rural Schools.

(a) The Small School.
(b) Reorganizing Agencies.
(c) Table Relating to Transportation of Pupils.
(d) Illustration, Hamilton Township, Delaware County.
(e) Letters from Patrons of Consolidated Schools.
(f) Illustration from Perry Township, Delaware County.
(g) Lllustrations from Lagrange County.
(h) Contract Forms for Drivers.
(i) Illustrations from Whitley County.
(j) Illustrations from Montgomery County.
(k) The Financial Phase of Consolidation.
(l) Other Improvements of Rural Schools.
(m) A Model Rural School in Indiana.

The Rural Schools.

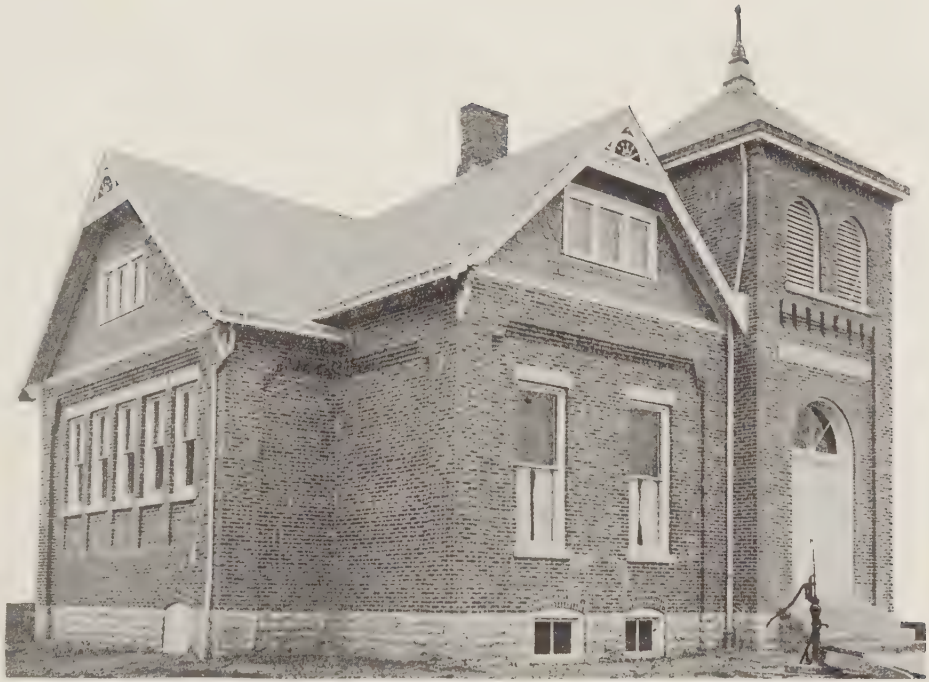
The Rural Schools have been the subject of so many excellent magazine articles and special reports during the last four years that it seems unnecessary in this report to discuss at length their conditions and needs. It is intended, only, that this section of the Biennial Report present in a brief form some of the agencies now at work to do away with the small expensive school and to improve the social and educational conditions among the people of rural communities.

(a) THE SMALL SCHOOL.

Attention is called to the réport of this department for the year 1900, in which statistics were given to show that more than one-half of Indiana's rural schools are too small to be maintained with profit. Indiana is not unique in this respect. The reports from all of the States in the central and western portions of the United States show the prevalence of schools enrolling from one to fifteen pupils each—all of which are too small. The large per capita cost, lack of social spirit, absence of educational enthusiasm, and almost total absence of vigorous exercise and play in these small schools have been emphasized in all of the State, county and township meetings, so that we have come to an almost unanimous view, namely, that the small school must be abandoned. The only proper question now is one of means.

(b) RE-ORGANIZING AGENCIES.

Both the sentiment of the public and the laws of the State are helping local school officers in the matter of the consolidation of schools, and it seems to be progressing as rapidly as any new movement should. A gradual adjustment will be looked upon with favor by the patrons, the majority of whom should at all times be in accord with it. The following table shows by counties—(a) The number of transportation wagons used; (b) the number of pupils



View of District No. 4, Union Township, Huntington County, Ind.

A Model School Building as regards light, heat, etc.

Fig. 26.

transported at public expense. Several new routes have been added since this table was made. It can be said, at least, that the use of 181 wagons, transporting 2,599 pupils, represents a new movement of considerable proportions.

(c.) TABLE RELATING TO TRANSPORTATION OF PUPILS.

COUNTIES.	Number of Wagons Used.	Number of Pupils Transported.	COUNTIES.	Number of Wagons Used.	Number of Pupils Transported.
Allen	1	20	Marion	3	60
Bartholomew	2	25	Monroe	6	140
Benton		10	Morgan	6	100
Boone	3	35	Newton	11	150
Cass		20	Owen	1	6
Clinton	6	96	Pike	3	28
Dearborn	4	20	Porter	1	8
Delaware	12	221	Posey	1	12
Fayette	4	45	Putnam	1	11
Fountain	11	120	Randolph		3
Fulton	2	35	Rush	1	8
Gibson	1	6	Starke	3	35
Hamilton	3	35	St. Joseph	2	36
Hancock	2	8	Switzerland	1	12
Hendricks	6	54	Tippecanoe	1	18
Henry	8	140	Union	1	6
Huntington	1	11	Vanderburgh	1	15
Jackson	4	50	Vermillion	2	45
Jasper	1	7	Vigo	2	18
Jefferson	1	15	Warrick	1	5
Kosciusko	10	90	Washington	13	216
Lagrange	20	300	Wayne	2	40
Lake	1	13	Wells	6	77
Laporte	5	109	White	2	27
Lawrence		6	Whitley	73	1,114
Madison	2	32			
			Total	181	2,599

(a) THE CONSOLIDATED SCHOOL.

HAMILTON TOWNSHIP, DELAWARE COUNTY, INDIANA.

The accompanying cuts, Figures 28 and 29, show the township roads, wagon routes and the eight transportation wagons ready to start homeward. If any one has doubt of the wisdom of the consolidation of schools he should visit this school located just outside the small village of Royerton, under the supervision of Township Trustee John M. Bloss and County Superintendent Chas. A. VanMatre. Here are gathered each day 192 pupils, 118

of whom are conveyed at public expense in wagons owned by the township. Seventy-four pupils belong to the original Royerton District and, of course, continue to walk to school. The distances the children ride are as follows:

Route No. 1—
2 children ride 3½ miles.
2 children ride 2½ miles.
3 children ride 1¾ miles.
3 children ride 1¼ miles.
1 child rides 3 miles.
1 child rides 1½ miles.

Route No. 2—
2 children ride 3½ miles.
3 children ride 3¼ miles.
2 children ride 2½ miles.
1 child rides 1⅛ miles.

Route No. 3—
4 children ride 4½ miles.
3 children ride 3 miles.
2 children ride 2½ miles.
4 children ride 2 miles.
2 children ride 1½ miles.
1 child rides 4 miles.

Route No. 4—
6 children ride 5¾ miles.
3 children ride 5½ miles.
5 children ride 3½ miles.
3 children ride 2½ miles.
1 child rides 4 miles.
1 child rides 3¼ miles.

Route No. 5—
8 children ride 5½ miles.
3 children ride 5 miles.
2 children ride 4 miles.
3 children ride 3½ miles.
4 children ride 3 miles.
2 children ride 1½ miles.
1 child rides 2½ miles.
1 child rides 1¼ miles.
1 child rides 2 miles.

Route No. 6—
4 children ride 3½ miles.
6 children ride 2¼ miles.
3 children ride 2 miles.
2 children ride 1¾ miles.
1 child rides 1½ miles.
1 child rides 1¼ miles.

Route No. 7—
6 children ride 3½ miles.
3 children ride 2⅝ miles.
1 child rides 2 miles.
1 child rides 1¾ miles.
1 child rides 1½ miles.

Route No. 8—
1 child rides 5½ miles.
3 children ride 4¾ miles.
2 children ride 4¼ miles.
2 children ride 2½ miles.
1 child rides 1¾ miles.

The first distance shown in each case is the extreme length of the route. This is the distance of the child from the school. In determining the length of a route no consideration is taken of the residence of the driver. He may live at either end of the route or anywhere along the route. The prices paid for driving are as follows:

Route No. 1. W. Holliday.....3½ miles, $1 00, 12 children.
Route No. 2. S. S. Alexander.....3½ miles, 1 00, 8 children.
Route No. 3. Otto Sharp.....4½ miles, 1 25, 16 children.
Route No. 4. H. Gumpp.....5¾ miles, 1 60, 19 children.
Route No. 5. J. M. Snyder.....5½ miles, 1 60, 25 children.
Route No. 6. Geo. Sheets.....3¼ miles, 1 25, 17 children.
Route No. 7. Fred. Besser.....3¾ miles, 1 25, 12 children.
Route No. 8. H. J. McClellan.....5¼ miles, 1 50, 9 children.

I made a personal inspection of this school on October 6, 1902. I asked the pupils to tell me what they thought of the plan and lacked one vote of having it unanimously in favor of transportation. The one pupil who did not like it said that he could state no objections. The enthusiasm, happiness, industry, and good health of the pupils was more marked than in any other rural school that I have visited. Here are gathered enough pupils to have in one class an active competition and genuine class enthusiasm. The "hum-drum" of a one-pupil class is not seen here. The collection of enough country pupils with good habits, good health and industry with all of the graded school advantages makes here a school even better than the best city graded schools. All of the teachers are qualified, well-trained and experienced. A music supervisor visits them each week, and the consolidation enables the County Superintendent to supervise when necessary. In addition to the grammar schools there is an excellent high school department under the direction of two qualified teachers. There are 27 pupils doing high school work, four of them young men who act as drivers for the wagons and are thus kept in school. There is almost entire absence of contagion in this township, and during the last school year the school continued without interruption, though the schools in adjoining townships were closed by health boards. The attendance is always good and punctuality is nearly perfect, tardiness being almost unknown. The wagons are owned by the township and cost from $80 to $125 each.

The teachers of grades, one to four inclusive, give the following figures in attendance:

Per cent. of attendance in Grades 1 and 2 of those who walk, 93.4.
Per cent of attendance in Grades 1 and 2 of those who ride, 93.7.
Per cent. of attendance in Grades 3 and 4 of those who walk, 96.8
Per cent. of attendance in Grades 3 and 4 of those who ride, 96.8

One of the Delaware county papers published the following article a few weeks ago. It is in a nutshell a good view of the experiment:

Thus, in the Royerton school there are 192 pupils and instruction is given by five teachers, as follows: First and second year pupils, Miss Stretcher; third and fourth year pupils, Miss Blazier; fifth, sixth and seventh year pupils, Mr. Pittenger; eighth year and one, two and three years of high school pupils, Mr. and Mrs. Brady.

Sectional View of Rural District School No. 4, with Pupils at Work—Union Township, Huntington County, Ind.

Fig. 27.

In the primary grades, where the pupils need the most help and direction of the teacher, the recitations are about twenty-five to thirty minutes and the same subjects in different forms are pursued during the day.

In the intermediate grades there are but three classes of pupils and the recitations can reach about twenty minutes. The teachers who have charge of the eighth year and the high school practically have charge of two grades, and here the recitations can be made longer. In fact, this school has about the same advantages as the city school, and with boys and girls coming to it from the home upon the farm, a majority do, full of energy, with abundant time for sleep and willingness to work, it is not surprising that they can do in seven months what it takes the city pupil nine months to accomplish.

The Trustee of Hamilton township has been particularly fortunate in the selection of teachers for this school—all the teachers have had experience; all have had more than ordinary school advantages; four of them have had Normal instruction and three of them are graduates of Normal schools.

If the pupils constituting this school were returned to the several districts from which they have come the following conditions would obtain:

First. Loss of teachers specially fitted for the work of the several grades. This loss can not be made up by a "good all-around" teacher.

Second. The high school could not be maintained. Two of the graduates of this high school last year are now doing the fourth year work in the Muncie high school, and according to the reports of their teachers are maintaining their rank well in their classes.

Third. The school spirit, which can only come from numbers doing the same work in the class, would be wholly lost. If there are only two in a class, or many times only one, the zeal for work on the part of pupil and teacher is largely lost. The pupil does not know whether he is doing well or not; he has no one with whom to compare himself.

Fourth. The attendance is better than it would be if the pupils attended the several separate schools. The attendance of those who are transported to school is from 5 to 10 per cent. better than those who walk from the home district, and no one is ever tardy.

Fifth. A larger number attend the school in the sixth, seventh and eighth year grades who would not attend at all in the separate schools. This was found to be true when the wagons were put on. Pupils reported to have quit school for one or more years discovered that their education was deficient and determined to begin anew. These pupils will be a positive gain to good citizenship—and some of them will find their way into the college and university. This of itself will be worth all that it costs many times over.

Sixth. Parents who are observant say that the cost of shoes worn out in walking to the separate schools and the cost of medicine and doctor bills will more than pay for the transportation.

Seventh. Transportation makes it easier to maintain a quarantine in case of disease and prevent the spread of contagion.

Eight Transportation Wagons Used in Hamilton Township, Delaware County, Indiana.

Schools consolidated at one place; 118 pupils transported.

Fig. 28.

(e) LETTERS FROM PATRONS OF CONSOLIDATED SCHOOLS.

I mailed uniform letters to the patrons of the consolidated school asking them to write me full and frank expressions of their opinions in relation to the success of the plan. The following are all of the replies received up to date:

October 21, 1902

Mr. Jones:

Dear Sir—I received your letter, wanting my opinion on the consolidation of schools. I think it is far better than the district school system. I think we need a larger building, large enough for all of the grades to be in one building, or better rooms for the first, second and third grades. Our children did very well last winter and so far this winter.

HENRY GRUMPP.

Shideler, Ind., October 21, 1902.

Mr. F. L. Jones, Indianapolis, Ind.:

Kind Sir—Your request at hand and contents noted. As a patron of the consolidated schools, I wish to say that I have reasons to favor and reasons to oppose the consolidation of our schools.

Yes, I think the consolidated schools give our children better advantages than do the district schools, for the reason, first, we are able to get better qualified instructors, because we do not have to hire so many. And then a well-qualified man will not go into a small district school. So, you see, it is a long step toward enabling us to perfect the profession of school teaching. Next, it throws a larger number of children of the same grade together, enabling them to exchange ideas. Next, it enables us to get more and better apparatus, for one school is easier supplied than eight or ten. Next, and of much importance, our children step out of the homes into a nice, dry (and warm, if need be,) wagon, and are so conducted to and from the schoolhouse without any wet backs or feet and no quarreling or fighting, being under a competent driver.

But I think we must go slowly. We must have good roads, or the slowness in travel will be a very great impediment. Another objection that we people in the country make is that there is danger of there being things introduced into the consolidated schools that pertain more to form than to utility. For instance, standing out of doors to be marched in, or too much gymnastics; we do not need that in the country, because we have chores for our boys and girls. I speak on these matters from close observation and strong convictions, desiring to take the conservative view rather than the radical on either side. I was once strongly opposed to this, but am now in favor of it under favorable conditions. And finally, since you have asked my opinion, I would candidly, frankly and honestly say, plan well, go slow, move only the smaller schools first and look away ahead as to where you will locate your house so as to best accommodate

those who may in the present and future wish to be accommodated. This is a matter of very grave importance. If I could talk to you, face to face, I possibly would be able to illustrate my points more clearly; however, as it is, I remain your well wisher in all things you undertake with strong convictions and honesty of purpose.

I feel highly complimented, I assure you, with having the privilege to address you on this very important question.

Yours sincerely,

A. J. YOHEY.

Muncie, Ind., October 24, 1902.

Superintendent F. L. Jones, Indianapolis, Ind.:

My Dear Sir—In reply to your inquiry concerning the consolidation of schools in Hamilton township, Delaware county, Indiana, I will say that I am exceedingly well pleased with the change from the district system to the consolidated school system. I have one child, a girl of sixteen years of age, to send to school. She is now taking the first year of high school work. Under the present system I will be able to give her a full high school course and yet have her under my care and protection. I find that the school spirit is increased by having the larger number of pupils assembled together as compared to that of the small district school.

I find that the health of the children is much better. There is no exposure to storms in bad weather. The wagons protect them from the wind and rain, consequently there is little trouble from coughs and colds. There is some saving in the wear of clothing, particularly shoes. I am not inconvenienced from my work to see that my child is placed in school or returned during stormy days. The wagon is in charge of a competent driver, who takes my child from my door in the morning and returns her there again at night. This is a great relief to me.

There is some talk of combining the entire township into one school. I am heartily in favor of the plan of so doing. A commissioned high school could then be established, with all the advantages of gradation in the lower grades. In conclusion I will say that I approve of the system.

Very truly,

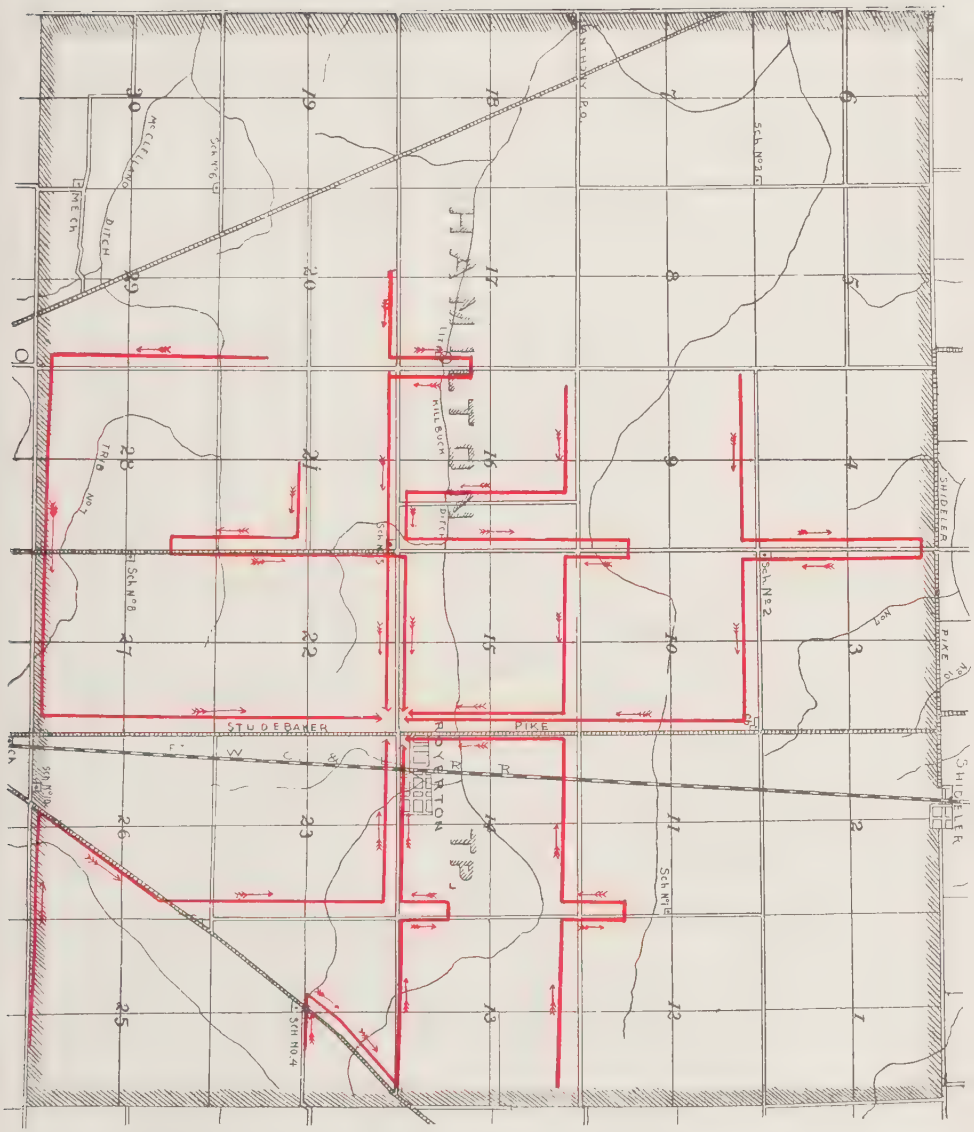
J. C. KAUFFMAN.

Muncie, Ind., October 24, 1902.

Superintendent F. L. Jones, Indianapolis, Ind.:

My Dear Sir—Your letter of inquiry concerning the consolidation of schools in my township Hamilton township, Delaware county, Indiana—is at hand. In reply I will say that I am very much satisfied with the movement. I am sending one child to the school. Under the present plan I am relieved of all concern about the child's getting to and from the school during bad weather. The wagon passes my door each morning and evening. I find that the health of my child is better. There is not so much trouble with coughs and colds which may result from wet feet. The wagons are warm and dry and there is no necessity for the child being exposed. There is some economy in the cost of clothing.

The gradation of the school is much better. The school spirit is high and the children take a deeper interest in the work. It is much easier



TRANSPORTATION ROUTES, HAMILTON TOWNSHIP, DELAWARE COUNTY, INDIANA.

⟶ shows routes. Positions of abandoned Schools also shown.

FIG. 29.

to keep the larger children in the school than when sending to the small district school. I will now have a high school close at hand and can feel that my child will be under home protection until she is old enough to care for herself.

I am in favor of the entire township being united into one school. I think it is possible to do this. I am a member of the Township Advisory Board, and am ready to give anything that will advance the interests of my township my most earnest support. I think that the consolidation of schools is a movement in the right line.

Very truly,
JOSEPH SHEETS.

Muncie, Ind., October 19, 1902.

Mr. F. L. Jones, Indianapolis, Ind.:

Dear Sir—In reply to consolidation of schools I will say that I think it is a greater benefit to children than public schools for this one reason, that the teacher can more plainly explain the matter to the children and make them understand much better by teaching one or two grades than teaching seven or eight. I am well pleased with consolidation of schools.

Yours truly,
GEO. F. WISSEL.

Royerton, Ind., October 20, 1902.

Mr. F. L. Jones, Superintendent, Indianapolis, Ind.:

Dear Sir—Your letter or request is at hand, asking my opinion about consolidation of schools. While I have not fully considered the subject, and at the same time the consolidation of schools being almost in infancy, it is yet too soon to determine what is best. But will reply. In the beginning I was not in favor of consolidation of schools. Can not say that I am yet. While the children may learn some faster, having the advantages of being in larger classes and have most likely better teachers and other surroundings, yet there are some objections of vital importance. While we all love to have our children educated, we must not force them too fast. At the same time we must learn to look after their health, whether it is best to crowd so many in one room or house them like sheep in a fold. One great objection of consolidated schools over the district schools is this, if fatal diseases are carried or start in these schools, then most all of the children of the township are exposed to it. Then under the ruling of the Board of Health of our county the school must close from thirty to forty days, while in district schools, if one is exposed, the other schools not exposed can go on. Still more, I am not certain the hauling of the children is the best for them at all times. True, there are days in stormy weather of rain and sleet, the hauling of them is nice, but in general is it not better for them to walk to school for health, by having exercise, than to leave a warm room, jump into a cold wagon and ride from one to three miles? There are thoughts that must come into the mind of every parent if the hauling system is to go on. I would have the township trustee to be very careful in hiring the teams, get good, gentle teams and careful drivers.

Now to the point: I have been in Hamilton township, this county, over forty-seven years; have paid my taxes to help build all the school-

Three Wagons Used in Transportation of Pupils in Perry Township, Delaware County, Indiana.

Fig. 30.

houses in the township, and we had good schools; the people were satisfied. Now, under the consolidation, the schoolhouses are going down, school lots not cared for, windows being broken; good many of the people are feeling sore as to the property loss of thousands of dollars; and now, if the consolidation of schools is to hold good, there must be greater temples built. More rooms to accommodate the children—more taxes. The American people are progressive, but they are going at a rapid rate. I am not an old fogy on the subject at all. You wanted my views. I do not think it will be long till they will fall back to the district schools. Many of the profound scholars of the day never saw a consolidated school or were hauled to school in a wagon. While this new system may prove better than many believe, yet it is to be thoroughly tested before final decision. Not condemning the school so far as it has been going on and hope it may prove better for all than many of us think, yet with what advantage children have over the district schools will hardly warrant a success.

Yours truly,

T. F. KIRBY.

Royerton, Ind., October 14, 1902.

Mr. Frank L. Jones, Indianapolis, Ind.:

Dear Sir—The per cent. of attendance in grades one and two, and grades three and four are as follows: Those who ride, 93.7—96.8; those who walk, 93.4—96.8.

Yours very truly,

MABEL E. BLAZIER.
BESSIE STRETCHER.

Muncie, Ind., October 26, 1902.

Mr. F. L. Jones, Indianapolis, Ind.:

Dear Sir—I am very glad to express my opinion on the consolidation of the Royerton school. I can say I am very well pleased with the school this term. I think it is a greater advantage to pupils than the old method.

Yours truly,

F. M. PITTENGER.

Muncie, Ind., October 20, 1902.

Mr. F. L. Jones, Indianapolis, Ind.:

Dear Sir—Your letter dated October 16th at hand requesting a statement from me on the advantages of consolidation of schools, or rather, what advantage it is to us in our township.

There are several different ways in which we find it an advantage. In the first place, as in our case, where we have children ready for the high school work, they have an opportunity for that work without the extra expense and trouble of sending them to the city. Then again, the convenience of having a wagon for transportation to and from school while the distance is much greater, the time taken up in going and coming is very little more than if they were walking the one and one-fourth miles to the district school.

Again, with six years' personal experience in teaching and a part of that time in a graded school, I know of the advantage in having large classes, namely, where they are not too large there is more enthusiasm, more interest taken in the recitations.

As to the primary work in the consolidated school, one advantage is in getting the little fellows to school dry and warm. However, I am afraid that our wagon is hardly warm enough for very cold weather.

Another advantage in the primary work is that each teacher has fewer grades and is enabled to give more attention to each separate grade.

The disadvantages that seemed to appear at the beginning are now in the background and are disappearing as the plan becomes older and more in use. One of the most prominent disadvantages talked of was the effect of contagious diseases getting into the school infecting so many more at once than in each separate district, but the danger of spreading such diseases is prevented by the co-operation of the trustee and the drivers of the different wagons.

There are many other advantages that might be enumerated here, but these few thoughts will show you that I am decidedly in favor of consolidation as conducted in Hamilton township, Delaware county.

Yours very respectfully,

O. M. SHARP.

(f) PERRY TOWNSHIP,

DELAWARE COUNTY, INDIANA.

Figure 30 shows wagons loaded with pupils driving toward school, and Figure 36 is a good illustration of the usual type of wagon used in the township and county. Consolidation in this township is quite as satisfactory, though not on as large a scale, as in Hamilton township.

(g) TRANSPORTATION IN LAGRANGE COUNTY, INDIANA, 1901-1902.

(See Figs. 35 and 37.)

Last year the County Superintendent mailed a convenient blank to the parents whose children were conveyed under township contract to ascertain their feeling upon the transportation system. The information thus gained was then compiled into a report, published and distributed. Again it has been thought wise to hear from the "parents of those who ride." Accordingly this blank containing nine questions was sent out to the 127 patrons, representing 300 pupils, whose children were thus taken to school. The great body of these reponded promptly and the result is as follows:

1. Number of children conveyed. Average per family, 2.
2. What is the distance by the route from your home to the

schoolhouse? Seventeen per cent. report 2 miles or less; 54 per cent., 3 miles or less; 86 per cent., 5 miles or less; and 14 per cent, more than 5 miles.

3. Has the driver come every day of the school year just closed? Eighty-six per cent. answer "Yes," and 14 per cent. answer "No."

4. Has the conveyance been on time both morning and evening? Seventy-nine per cent. say "Yes," and 21 per cent., "No."

5. Is the vehicle comfortable? Sixty-eight per cent. so regard it and 32 per cent. do not. In answer to the supplementary question, "What suggestions have you?" Thirty-eight per cent. desire a better cover to vehicle; 4 per cent. complain of the driver's having furnished wet blankets from the horses to cover the children; 50 per cent. request a means of keeping warm; 8 per cent. have endured overcrowded hacks.

6. Is the team sufficiently speedy? Seventy-eight per cent. report "Yes," and 22 per cent. "No."

7. Do you regard the driver as responsible and the conveyance on the whole as reasonably safe? Eighty-three per cent. answer "Yes," and 17 per cent. "No."

8. What is your opinion of the transportation method of schooling your children? Eighty-five per cent. consider it good and 15 per cent. are not pleased with it?

Special interest attaches to the above report. It is to be noted that more than one-half the pupils were conveyed three miles or less, leaving the matter of objectionable distance really open to about one-seventh of the pupils. A portion of the school officers have declined to convey children residing within two miles of the school on the grounds of the distance necessarily walked to the school by children where no hack route is established as well as that of economy, 79 per cent. report the conveyance as regular in making the trips on time. The uniform contracts of this year, when blanks are properly filled, may improve this feature as the driver contracts not to arrive at the school before a specified time as well as not later than a specified time.

As in the reports last year there seems to be a general feeling that many of the vehicles should be more comfortable. A study of the report shows that the trend of sentiment is toward better enclosed rigs with special provisions for keeping warm. Under the

Consolidated Schools, Union Township, Montgomery County, Indiana.

See Written Description in this Report.

Fig. 31.

contracts of the coming year the driver's responsibility will be clearly defined and the physical and moral saftey of the children will be enhanced. Where the bidding system of letting conveyance has been the custom, improvement in transportation has been the most difficult for a variety of reasons. State Superintendent Frank L. Jones submits the following opinion upon the matter of transportation contracts: "I am not in favor of letting contracts for conveying pupils. It is not a matter which can be lumped off to the lowest bidder. It would be as sensible to employ teachers upon this basis. The law does not contemplate that the contracts for transportation should be made in this way. It is entirely proper for a trustee or advisory board or both to fix the amount that will be paid and then select the best man for the work at that price."

Notwithstanding some unsatisfactory conditions under which children have been conveyed, it is evident from the continuous answers upon this method of schooling children that it meets with the approval of the parents. Quite a number of the parents feel somewhat of hardship in certain instances with small children, others have expressed themselves against the bidding system. A marked sentiment is manifest for drivers who are in every way worthy of respect and who have a strong sense of responsibility in looking after the welfare of the chidren.

Long before centralization of schools was thought of, one of our most able State Superintendents held "that no school can claim good conditions for work if it contains fewer than twenty-five pupils." This was used at that time as an argument for the enthusiasm that comes from numbers, for "that mental friction of mind with mind which is necessary to the best mental growth." The pupil who is both foot and head of his class will soon lose interest. "There is nothing more pathetic and in some ways ludicrous than the attempt of a teacher to hear the recitation of one pupil,—the indifference, the lack of attention and interest, and the general failure of results." Hence in general it is held that small schools should be abandoned if for no other reason, because the pupils can not from the very nature of the circumstances receive the instruction they should, laying aside other very important considerations.

A Model Wagon for the Transportation of Pupils.

(Kindness of Delphi Wagon Works.)

Fig. 32.

(h) CONTRACT FORMS FOR DRIVERS.

At a recent meeting of the Lagrange County Board of Education it was decided to have a uniform contract for transporting pupils. It was felt that such a method would assist in a clear understanding of all concerned and encourage co-operation in this work. Blank lines are introduced in several places for such "additional considerations" as the contractor and the township may desire to agree upon.

The following is the form adopted:

SCHOOL CONVEYANCE CONTRACT.

..... Township, Lagrange County, Indiana.

This article of agreement made and entered into this ..... days of ..... 190.., by and between ....., of Lagrange County, in the State of Indiana, and ..... School Township, in the said County and State.

Witnesseth, That the said ....., party of the first part, doth hereby agree to and with the said ..... School Township, party of the second part, as follows, to wit:

That the said ..... will convey by spring hack all children herein stated:

.....

.....

and such other children of school age whose parents may later reside on the route or in the district.

The transportation route shall be as follows:

.....

.....

The said party of the first part further agrees to arrive at ..... between .... a. m. and .... a. m., standard (sun) time and to leave said schoolhouse promptly at the close of each day's session and convey the foregoing pupils to their respective homes as expeditiously as possible in the same general manner as in the morning. He shall strictly prohibit profane or obscene language and boisterous conduct in or about the hack. The said party of the first part further agrees not to use tobacco while in charge of the children, neither will he permit its use by any pupils while in his custody. The pupils shall be conveyed with due regard for their comfort and the team shall not only be safe but reasonably speedy.

(Additional considerations.) .....

.....

.....

The services of the said party of the first part shall commence on the .... day of ....., 190.., and continue throughout the school year for such days as the school shall be in session.

The said party of the first (second) part shall provide a comfortable and safe conveyance, and said vehicle shall be so constructed that it can be entirely closed during inclement weather.

(Additional considerations.) .....

.....

.....

The said party of the second part in consideration of the prompt fulfillment on the part of the party of the first part contracts and agrees to pay ..... dollars per day for services rendered as above stated.

In case party of the first part fails, neglects or refuses to faithfully do and perform each and every one of the covenants and agreements herein specified on his part to be performed, then this contract shall be void at the option of the party of the second part, and the party of the second part may immediately bring suit on the bond annexed hereto for any damages sustained to the party of the second part by reason of the failure of the party of the first part to perform his covenants and agreements herein contained.

In Witness Whereof, the above named parties have signed the above contract this ..... day of ....., 190..

Party of First Part.....

Party of Second Part.....

By .....Trustee

Know All Men by These Presents, That we, ... and ....., are held and bound unto the State of Indiana in the sum of ..... dollars, for the payment of which we do bind ourselves jointly and severally. The condition of this obligation is such that we do hereby guarantee the full performance of all conditions specified in said contract on the part of said ..... to be kept.

Now if the said ..... shall faithfully fulfill all the requirements mentioned, then this obligation to be void, otherwise to be and remain in full force.

Witness our hands and seals this ..... day of ....., 190..

.....[Seal]

.....[Seal]

(i) WHITLEY COUNTY, INDIANA.

The work of consoldiation is in its first stage in this county. We are pushing the movement no further than public sentiment will support us. Etna township is at present building a modern well-equipped house to accommodate total consolidation. We held public meetings over the township last winter for the purpose of discussing the question, circulated a petition at the right time and secured 97 per cent. of the patrons for consolidation. The house is not yet completed, making accurate figures impossible; yet we expect the cost of conducting school on the new plan to be about the same as it was before.

Other townships have abandoned schools as follows: Thorncreek, 2; Union, 3; Columbia, 1; Richland, 3; Cleveland, 1. There is usually a little opposition until the plan is tried; then the children are enthusiastic over the matter and that settles it. In Cleveland township, where the trustee met with a little opposition at first, the patrons have petitioned him to sell the abandoned school property to destroy all possibility of re-establishing the school. Wagons are purchased by the trustees at an average cost of $100.00. We are careful to get a good driver as he is an important factor in the success of the plan. Drivers are paid $1.50 per day. Wagons are closed and warmed with small stove. In all the townships named above, except Etna, no additional teacher is required in the school to which the children are brought; we therefore save about $135 by each abandonment. All the advantages usually claimed for the plan are verified in this county.

The spirit of consolidation is alive here. The end is not yet. By careful management of the details it is more than probable that the people will demand total consolidation in several of the townships within the next few years.

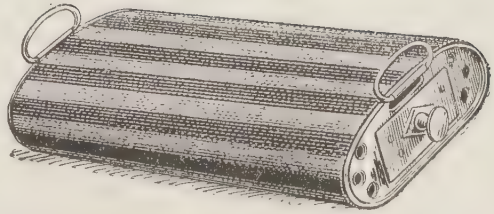
GEO. H. TAPY,
County Superintendent.

(j) MONTGOMERY COUNTY, INDIANA.

(a) CONSOLIDATED SCHOOL, UNION TOWNSHIP, MONTGOMERY COUNTY, INDIANA.

This schoolhouse (see Fig. 31) was erected in the summer of 1901. The cost of the house, two acres of ground and furniture, was about $12,000. The children from four former school districts are accommodated in this building. There are four rooms, two large halls and basement, and the building is heated by two furnaces, using coal. There are two large wagons to haul the children, and the cost of the two drivers is about $3 per school day. There are also many children who come in private conveyances, and their horses are housed during the school hours in sheds built by the township, upon the back of the lot. The territory from which the children come is about three miles square, the longest drive being about five miles.

L. WALTER BREAKS,
Trustee.



A Good Wagon Heater. Much Better than a Stove.

(Kindness of Delphi Wagon Works.)

Fig. 33.

(b) CONSOLIDATED SCHOOL, SUGAR CREEK TOWNSHIP, MONTGOMERY COUNTY, INDIANA.

This school building (see Fig. 34) is a modern four-room structure located on two acres of ground in every way suited to the needs of the schools. The cost of building, grounds and stables was $10,500. Four new wagons, with a capacity of twenty-five pupils each, are required to haul the pupils. Each wagon is finely upholstered and well heated, so that the pupils are always comfortable. The cost of each wagon was $150. The routes covered by the wagons embrace twenty-three square miles, and are six to seven miles in length. The average time required for making the trips is one hour and twenty minutes. Six schools are centralized here; 135 pupils enrolled. The school is modern in every respect.

M. U. HALLOWELL,
Trustee.

(k) THE FINANCIAL PHASE OF THE CONSOLIDATION OF RURAL SCHOOLS.

To the end that knowledge and learning be generally diffused throughout a community, the various States have provided for a general and uniform system of common schools, to be supported by a public tax. Schools have been established in each community within convenient walking distances of the homes. Owing to the uneven distribution of the population, some communities may have very large schools, in which the per capita cost is small, while the adjoining communities may have small schools, in which the per capita cost is comparatively large. A school of fifty pupils may be maintained at practically the same expense as a school of ten. The principal items of expense are tuition, fuel, supplies, repairs, and buildings. A small school must have the same provisions as a larger one in all these items. The per capita cost can not be reduced by maintaining each separate school. The only solution to the difficulty is to combine two or more such schools, or to combine them with larger schools. In this manner it may be possible to reduce the cost of tuition by reducing the number of teachers, of fuel by reducing the number of rooms to be heated, and consequently the cost of supplies, repairs, and buildings. While there is a saving in all of these items, another factor is introduced by the

CONSOLIDATED SCHOOLS, SUGAR CREEK TOWNSHIP, MONTGOMERY COUNTY, INDIANA.

See Written Description in this Report.

Fig. 34.

consolidation—the cost of transportation of the pupils of the abandoned schools. That the per capita cost of the small schools may be reduced, this cost of transportation must not be greater than the saving in the other items of expense. The reduction in per capita cost and the expense of transportation will depend wholly upon local conditions—the number of pupils to be conveyed, the distance, and the condition of the roads.

The subject may be best presented by studying special cases. The following statistics have been collected from places where the experiment has been made:

	Daleville, Ind.	Cross Roads, Ind.	Selma, Ind.	Royerton, Ind.	Webster, Ind.	Economy, Ind.	Raleigh, Ind.	Warwick, Mass.	Concord, Mass.	Terre Haute, O.
Number of teachers employed in the consolidated school	6	2	4	5	4	5	4	3	12	5
Number of teachers added because of consolidation	.....	.....	.....	3	2	.....	3	2	.....	.....
Number of teachers fewer in the districts	1	1	2	5	3	4	5	8	.....	2
Number of teachers doing grade work in the school	5	2	3	4	3	4	3	3	.....	4
Number of teachers doing high school work in the school	1	.....	1	1	1	1	1	.....	.....	1
Total daily salary of the teachers in the grades	$12 25	$5 10	$7 00	$10 30	$7 50	$9 10	$7 20	$5 40	.....	$9 00
Total daily salary of the teachers in the high school	3 50	.....	3 50	3 20	3 25	3 50	5 00	.....	.....	2 80
Total number of pupils in the consolidated school	195	53	141	190	140	130	122	96	500	.....
Total number of pupils in the grades	186	53	119	175	122	110	104	.....	500	.....
Total number of pupils in the high school	9	.....	22	15	18	20	18	.....	.....	.....
Number of schools abandoned in the township	1	1	2	5	3	4	4	8	5	.....
Number of pupils conveyed at public expense	7	7	24	129	50	25	.....	60	150	.....
Number of pupils conveyed in public conveyance	7	7	24	129	25	14	.....	60	.....	.....
Number of pupils conveyed in private conveyance	.....	.....	.....	.....	25	11	.....	.....	.....	.....
Number of wagons used	1	1	1	7	2	1	.....	4	5	.....
Daily expense of drivers	$1 25	$1 25	$1 50	$8 75	$2 20	$0 75	.....	.....	$12 00	.....
Daily expense for private conveyance	.....	.....	.....	.....	2 20	40	.....	.....	.....	.....
Cost of wagons	.....	.....	100 00	500 00	.....	.....	.....	.....	.....	.....
Cost of fuel per room per year	30 00	30 00	30 00	30 00	32 00	15 00	37 00	.....	50 00	20 00
Cost of all other supplies per room per year	25 00	25 00	25 00	25 00	20 00	20 00	25 00	.....	.....	.....

From the above list it may be seen that Daleville, Ind., has a school employing six teachers. Five are doing grade work, while one is doing high school work. A small school of seven pupils is conveyed to this school. No additional expense is incurred in the

Daleville school because of the admission of these seven pupils. The only expense for these seven pupils is the cost of transportation, which is $1.25 per day. To maintain a separate school for them would cost much more than this amount. Other district schools in the township in which this school is situated cost from $2.75 to $3 per day. The same results would be secured had the school as many as twenty or twenty-five pupils. All could be conveyed in one wagon, and the large school would still admit them, since they would be distributed through the grades. No one teacher would receive all of them.

Cross Roads, Ind., shows similar conditions. A school of seven pupils is conveyed to this school, which employs two teachers, at the daily expense of $1.25. The saving in this case is the same as at Daleville. These two schools are located in the same township. The wagons are provided by their drivers. Thus the total expense for each is $1.25 per day. The saving to the township is from $3 to $3.50 per day. For a seven-and-a-half-months' term of school the saving is from $450 to $500 per year.

Selma, Ind., shows even greater results. Two schools have been abandoned and combined with the Selma school. The pupils—twenty-four in number—are conveyed in one wagon at a daily expense of $1.50. No additional teaching force is required in the Selma school. The saving to the township is about $600 per year.

As a solution to the rural school problem, the school at Royerton, Ind., is a fruitful field for study. Six districts, comprising an area of about eighteen square miles, have been combined into one. The union school is located at Royerton. Under the separate-district plan seven teachers were employed—two at Royerton and one in each of the other districts. Now five are employed in the union school, a difference of two teachers resulting from the change. Three teachers are doing grade work, one does high school work, and one divides his time between grade and high school work. Some little high school work was given when there were but two teachers in the Royerton school, but no high school work was given in the district schools outside of the Royerton school. Under the separate-district plan seven rooms were maintained. Now there are but four, and a small room used for recitations, which adds no expense. No additional buildings were needed at Royerton, due to the fact that there was an old building which had

not been used for several years. Thus there has been a saving in tuition by reducing the number of teachers. Not considering the high school, four teachers do the work formerly done by seven teachers—a difference of three. The cost of fuel, supplies, and repairs for seven rooms has been reduced to the cost of four. There are 190 pupils enrolled in the school, 129 of whom are conveyed from the abandoned schools—about two-thirds of the number enrolled in the union school. The daily expense for transportation is $8.75. The following will show the comparative cost of the two plans:

DISTRICT PLAN.

Salaries for seven teachers for seven months	$2,492 00
Institute fee for seven institutes	124 60
Fuel for seven rooms at $30 per room	210 00
Supplies for seven rooms at $10 per room	70 00
Repairs at $20 per room	140 00
Total	$3,036 60

CONSOLIDATION PLAN.

Salaries for four teachers for seven months	$1,442 00
Institute fee for seven institutes	72 10
Fuel for four rooms at $30 per room	120 00
Supplies for four rooms at $10 per room	40 00
Repairs at $20 per room	80 00
Total	$1,754 10
Difference in favor of consolidation	57 50
	$3,036 60
Transportation, at $8.87 per day	1,225 00
	$2,979 10

The salaries shown in the above estimate are the actual salaries paid the teachers. The cost of the fuel has been estimated upon a coal or wood basis. The supplies include maps, globes, charts, desks, books of reference, etc. The repairs include fencing, wells, pumps, floors, windows, papering, janitor work, etc. These are only estimates. If there is any error, it has been in making them too low. However, this would only make the saving greater, and does not interfere with the argument. Buildings are not included. There was no additional expense for buildings.

Consolidated School, Greenfield Township, Lagrange County, Indiana.

A Fine Wagon on Right.

Fig 35.

PER CAPITA COST.

	Consolidated Plan.	*District Plan.*
Tuition per day	$0.060	$0.100
Transportation per day	0.067	.....
Other items	0.012	0.041
	$0.139	$0.141

The pupils of the original Royerton school are not transported, which makes a reduction from 14.1 to 7.2 cents per capita. There are about sixty pupils in this district.

In the township in which Royerton is situated there are other schools not centralized at Royerton. Each of them enrolls more than thirty pupils. The cost of tuition can not be greater than 8 cents per capita, using as a basis the same rate as used in the other estimates—$2.50 per day. The cost of transportation can not be much less than six cents per day per capita, considering that the average cost of driver, wagon, and team is $1.25, and that a wagon may convey from twenty to twenty-five pupils. If there be thirty pupils two wagons may be needed, which would increase the per capita cost. To consolidate such schools would be more expensive than to maintain separate schools.

Webster township, Wayne county, Indiana, has centralized all its schools at one point—the town of Webster. The township is small, and much of the school population is centered near Webster. The outlying districts have a very small school enumeration. It has been found very much more satisfactory to convey the pupils from the three out-districts to the Webster school than to maintain these small schools. These schools have been abandoned. To maintain these schools would cost from $8 to $9 per day. Aside from the high school but one teacher has been added to the Webster school because of the consolidation, at an expense of $2.50 per day. Twenty-five pupils are conveyed in two wagons at a daily expense of $2.20. Twenty-five pupils are conveyed in private conveyances at about the same expense.

Perry township, Wayne county, Indiana, shows similar conditions. The township has one school at Economy. The rural population is scattering. Twenty-five pupils are conveyed at a daily expense of $1.15. Formerly there were four schools maintained in addition to the Economy school; now there are but twenty-five pupils not within convenient distance of the Economy school.

One of the Wagons Used in Perry Township, Delaware County, Indiana. Cost $125.

Fig. 36.

Six years ago Warwick, Mass., maintained nine schools twenty-four weeks per year. The average attendance of pupils in the town was eighty-seven. Teachers' wages in the eight outside schools were $5 per week; in the center school, $6 per week. With few exceptions, the teachers were young and without experience, educated in the district schools. Some were under sixteen years of age—one term a pupil in a school, the next term a teacher. Occasionally, in recent years, a teacher of marked ability and successful experience has been employed, but the number of schools made it impossible to pay wages that would retain the services of well-qualified teachers many terms. The schools were poorly supplied with books and materials.

Now all the pupils in town are in three rooms of one modern, well-lighted, heated, ventilated building, pleasantly situated in the center of the town. The rooms are supplied with good blackboards, and with books and appliances for the use of pupils. The school has three teachers—normal school graduates of exceptional ability. The average wages paid are $9 a week; the school year is thirty-six weeks. Special teachers of music and drawing visit the schools each week. Pupils are conveyed to the center union school from distant parts of the town. The average attendance in the full term was ninety-six—a gain over the attendance in all of the nine schools six years ago. The schools are well-graded from lowest primary to highest grammar grade, three classes in a room. Teachers are selected whose qualifications are especially adapted to the ability and needs of the pupils under their charge. The number of recitations being less than in ungraded schools, the teachers and pupils do much more effective work. The relation of the teachers to one another is one of mutual helpfulness, and the association of so many pupils in the schoolrooms and on the grounds under the supervision of the teachers is pleasant and beneficial.

As the result of the consolidation of its schools and a wise administration the town has in six years lengthened the school year 50 per cent., increased the teachers' wages 75 per cent., and employed special teachers for drawing and music, without materially increasing the school tax of the town. Because of reduction in the number of schools through consolidation, the cost of instruction by the regular teachers has been lessened. A large increase in the

Small Consolidated Schools, Bloomfield Township, Lagrange County, Indiana.

Fig. 37.

amount of money received from the income of the state school fund has been of great benefit to the schools.

Much time that was needed for travel by the superintendents and special teachers in reaching many small scattered schools is saved for profitable use in the one building in the union school.

The citizens of Warwick have manifested a deep interest in their public schools by the employment of an efficient superintendent, the erection of a school building which is a credit to the town, the consolidation of its schools, and the employment of efficient teachers.

In general it may be said that any school in which the daily per capita cost exceeds 15 cents may be consolidated with other schools without increasing the expense. This estimate will be true when the cost of tuition is $2.40 per day. This rate will be reached when the enrollmentof the school falls below twenty, and the conveyance may be made with one wagon.

Considering that a teacher may successively teach a school of fifty pupils, provided that but one or two grades be represented, and that he receives $50 per month for his services, the minimum cost of tuition will be $1 per month per capita. Also considering that wagons may convey from twenty to twenty-five pupils, and that the cost of wagons, drivers, and teams will be from $1.25 to cost of tuition will be $1 per month per capita. Also considering be $1.20 per month per capita. The cost of repairs, supplies, and fuel will be about 20 cents per month per capita. The total cost of maintaining the school of fifty pupils will be $2.40 per month per capita. With this estimate as a working basis the following is compiled:

TABLE SHOWING THE RATE LEVY PER $1,000 FOR A GIVEN NUMBER OF PUPILS FOR A GIVEN LENGTH OF TIME WHEN ALL ARE CONVEYED.

Number of Pupils.	Number of Months and Rates.				
	1 Month.	6 Months.	7 Months.	8 Months.	9 Months.
100	$0 24	$1 44	$1 48	$1 92	$2 16
200	48	2 88	3 36	3 84	4 32
300	72	4 32	5 04	5 76	6 48
400	96	5 76	6 72	7 68	8 64
500	1 20	7 20	8 40	9 60	10 80

The rate of tax levy may be computed from this table for any number of $1,000 for a given number of months and for a given

Rural Training School, Vigo County.

(Only a few of the pupils.)

Fig. 38.

number of pupils. Divide the rate of tax levy shown by the table for a given number of pupils for the given number of months by the given number of $1,000, and the result will be the rate of tax levy on the dollar. For instance, the number of pupils in a certain township is 400; the desired length of school term is eight months; the assessed valuation of property is $1,000,000. By referring to the table the rate is $7.68; dividing this amount by 1,000 gives $0.00768—the rate on $1, or $0.768 on $100. This rate would be excessive for the State of Indiana. The maximum rate established by law is $0.96 on the $100. The maximum special school levy which must provide for all expense other than tuition is $0.50 on the $100. The maximum tuition levy is $0.35 on the $100. These are the local levies. In addition to these levies the State levies a tax of $0.11 on the $100, which is collected from the various counties and redistributed, together with the revenue on the permanent school fund, in proportion to the school enumeration. Deducting the $0.11 levied by the State in the case cited above, the local levy would need be $0.658 on the $100. Not having made provisions for buildings in the estimate for this levy, the rate approaches too near the maximum local levy—$0.85 on the $100. A margin of $0.30 on the $100 should be left for cost of buildings, the remaining $0.55 should pay all other expense for maintaining the school. However, in the township being considered, no more than one-half the pupils would need to be conveyed. By centralizing at two points the other one-half would be within convenient walking distance from the union schools. To convey but one-half would reduce the levy from $0.658 to $0.466 on the $100. This rate would not be excessive. Most cities and towns levy higher rates.

For additional illustration another specific case is given. A certain township enrolls 300 pupils; the desired length of school term is seven months; the assessed valuation of property is $850,000. By referring to the table the rate is $5.04. Dividing this amount by 850 the rate is $0.00593 on the $1, or $0.593 on the $100. Deducting the $0.11 levied by the State, the local levy is $0.483 on the $100. If no more than two-thirds of the pupils would need be conveyed, the rate would be $0.39 on the $100. The conditions in this particular township are such that not more

than one-half would need be conveyed. In such case the levy would be $0.33 on the $100.

The illustrations given can not be universally applied. However, the following summary may have general application:

1. To convey all pupils will require an excessive rate of tax, unless the number of pupils be small and the assessed valuation of property large.

2. The township with a school enrollment of one hundred to an assessed property valuation of $250,000 may convey one-half the number of pupils with a reasonable rate of tax levy.

3. Any school with an enrollment of fewer than twenty pupils may be combined with a similar or larger school at no increased expense, provided the distance be not too great for the transportation and the roads permit of easy and rapid transit.

CHARLES A. VAN MATRE,
County Superintendent of Schools, Muncie, Ind.

(I) OTHER IMPROVEMENTS.

While it is desirable and necessary to close small schools, it is also apparent that many rural schools are too large to be abandoned with profit while others are not favorably located as regards roads or proper centers about which to consolidate. In these there is constantly before us the question of their improvement. In other words, school organization is not the vital question in many communities,—rather what shall we do to improve their interiors, their teachers, their appliances and their sanitary conditions. Below is given in a well written article by Prof. Howard Sandison and illustrated by Figures 38, 39, 40 and 41, a model rural school in so far as an average community with ordinary conditions can afford. It has been the desire of this Department for four years to establish somewhere in Indiana, in connection with the State Normal School an ideal country school; that is a school in an average community, average in size, with an average income; but with the superior teacher and good equipment. In this new rural training school in Vigo county we have all of these conditions. It is now proper that it should be called a model for the State. The renovation and equipment of this school, transforming it from an ordinary country school to one of modern points, is an illustration of

the possibilities of all poorly equipped schools. Its inspection by hundreds of teachers every year will distribute throughout the State a leaven for better country school conditions.

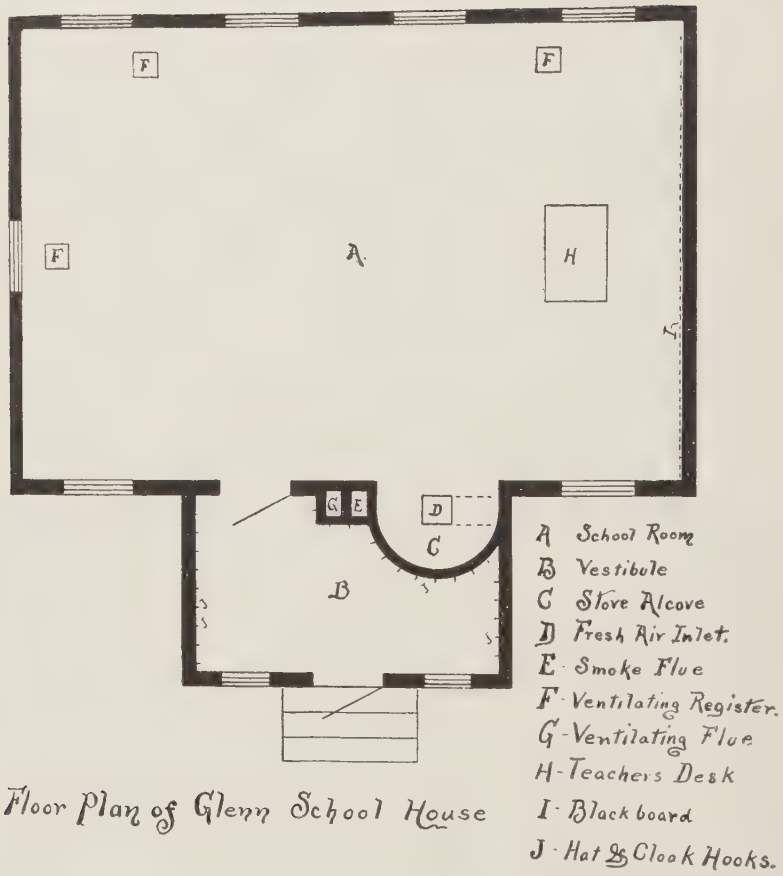
(m) THE RURAL TRAINING SCHOOL OF THE INDIANA STATE NORMAL SCHOOL.

(See Figs. 38, 39, 40, 41.)

From the organization of the Indiana State Normal School there has existed as one of its departments a school for observation and practice. This school is located in the Normal school buildings and constitutes the eleventh district of the Terre Haute city schools. It contains the grades from the kindergarten to the high school, and has the organization of the regular grades in the other districts of the city schools.

This training school has during all these years afforded the students of the State Normal School ample opportunity to observe the work in the different grades of a city school system. It has also given opportunity for the planning and presentation of lessons in such schools. The observation and practice are of such a nature as to make the students acquainted with the course of study, programme, mode of discipline, processes in teaching, reports to principals and superintendents, supplementary reading work, examinations, etc., incident to a city school system. The results obtained from the observation and practice work in these grades of the city schools have always been held to be among the valuable results arising from a course in the State Normal School.

Quite a number of graduates have obtained positions in the country schools after graduation, and many of the under-graduates have taught for a considerable period in the country schools after taking a portion of the course in the Indiana State Normal School. In addition to this, almost all of both classes have received much of their education in the rural schools. They have, therefore, become accustomed to the meager equipments, to the frequent changes of teachers, to the inexpensive papering and painting by unskillful workmen, to the general lack of repairs, and to the neglect as to coal houses, out buildings, etc., which are only too common in the rural schools of the state. In consequence, it has long been felt that the State Normal School would more adequately fulfill its



RURAL TRAINING SCHOOL.

Fig. 39.

service to the State by establishing a rural training school, in order to give to the students of the school an opportunity to observe and to practice systematically in such schools, and thereby to become acquainted with the peculiar difficulties, as well as the peculiar advantages belonging to such a school, and to make, in addition, a study of the rural school problem as a whole.

As a result of these considerations, arrangements for such a school were completed during the summer of this year (1902), and at the beginning of the school year in September, a rural training school was organized and is now in successful operation. The school selected is not a village or town school, but essentially a typical country school, presenting the usual peculiarities and difficulties of such a school. It is school No. 6, at Chamberlain's Crossing, in Lost Creek township. It is situated six miles east of Terre Haute, on the interurban line between Terre Haute and Brazil. The agreement was entered into between the Board of the Indiana State Normal School, as the party of the first part, and Joseph Ripley, trustee of Lost Creek township, as the party of the second part. It provides that School No. 6, situated as above noted, shall be used by the students of the Indiana State Normal School as an observation and practice school. It also provides that repairs, improvements, apparatus, etc., beyond those usually provided by the trustee for the country schools, shall be paid for jointly by the trustee and the Normal School Board. A further provision is, that the teacher during the seven months of the school year (the period during which the schools of the township continue), shall be paid the maximum salary by the trustee, and a certain fixed amount in addition by the Board of the Indiana State Normal School, and that during the continuance of the school beyond the seven months, so as to complete the period of ten months, the teacher shall be paid by the Board of the Indiana State Normal School. The compensation for the janitor is also, according to the agreement, to be provided for by the State Normal School Board.

The grades, course of study, etc., are to be in accordance with the rural schools of the township and county, but the department of Pedagogy in the State Normal School is to make any variations in programmes or processes of teaching, apparatus, etc., that may be required for the work in observation and practice. The school

Interior View of Model Rural School.

Rural Training School, Vigo County.

Fig. 40.

is to be open for observation to the teachers of the township and county in general.

The house, a picture of which is shown in this article, Fig. 38, is a one-room frame building, constructed originally for a schoolhouse, its situation being about half a mile east of its present location. It was moved, some twenty years ago, to Chamberlain's Crossing.

Prior to the repairs incident to the agreement, it was almost destitute of paint upon the outside, unskillfully painted upon the interior, marked here and there by window panes replaced by unskillful hands, heated by a common cannon stove in the center of the room, necessitating a pipe near the ceiling extending probably half the length of the room; the fence was unpainted and somewhat out of repair, the outbuildings for the girls and for the boys were in close proximity and without any enclosing lattice or fence as a screen, and the yard was in a neglected condition. The furniture was meager, consisting of a small table, three crude red benches, two old chairs, some thirty-five single desks in fairly good repair, and four side lamps, two only having chimneys.

The books belonging to the school, kept in a small closet with chalk, etc., and at various parts of the room, without bookcase, were as follows:

Robinson Crusoe	DeFoe.
Deerslayer	Cooper.
A Tale of Two Cities	Dickens.
John Halifax, Gentleman	Mulock.
Tom Brown at Oxford	Hughes.
Swiss Family Robinson	
The Pathfinder	Cooper.
Tennyson's Poems	
Whittier	
Longfellow's Poems	
Bryant's Poems	
From September to June with Nature	M. L. Warren.
Sea-Side and Way-Side	Julia McNair Wright.
Aunt Martha's Corner Cupboard	Mary and Elizabeth Kirby.
Botany	Wright.
Little Brothers of the Air	Olive Thorne Miller.
Stories Mother Nature Told	Andrews.
Bible Studies	Bennett and Adeney.
Lessons in Right Doing	Emma L. Ballou.
Patriotism in Prose and Verse	Gordon.
Holiday Entertainment	

Interior View of a Model Rural School.

Rural Training School, Vigo County.

Fig. 41.

Samantha at Saratoga	Holley.
Old Christmas	Irving.
Uncle Tom's Cabin	Stowe.
Sketch Book	Irving.
The House of Seven Gables	Hawthorne.
Wonder Book	Hawthorne.
The Cricket on the Hearth	Dickens.
Bunyan's Pilgrim's Progress	
Jo's Boys	L. M. Alcott.
Little Women	L. M. Alcott.
Little Men	L. M. Alcott.
The Story of the Hills	Hutchinson.
Little Jarvis	Mary Elliot Seawell.
The Boys of 1745	James Otis.
Little Lame Prince	Mulock.
Cadet Days	King.
The Ark	Kellogg.
With Clive in India	Henty.
By Pike and Dyke	Henty.
Black Beauty	Sewell.
Lost in Samoa	Ellis.
The Hoosier School Boy	Eggleston.
Rough and Ready	Alger.
The Story of Patsy	Kate Wiggin.
The Little Earl	Edmund Garrett.
Elsie Dinsmore	Martha Finley.
An Odd Little Lass	Jessie Wright.
The Water Babies	Kingsley.
Fables and Folk Stories	Scudder.
Aesop's Fables	Geo. Townsend.
Story of the Norsemen	Dawes.
Old Stories Retold	Binner.
History of the Spanish War	Watterson.
Library of South America	Mackenzie—Stead.
The Making of the Great West	A. Drake.
History of United States	Mrs. Helen M. Pierson.
Signal Boys of '75	James Otis.
War of Independence	Fiske.
Lafayette, the Friend of American Liberty	Alma Holman Burton.
Stories of the Red Children	Dorothy Brooks.
Daniel Boone	Hartley.
True to His Home	Hezekiah Butterworth.
In the Days of Audubon	Hezekiah Butterworth.
Paul Jones	Sewell.
Stories of Columbia	Glascock.
People and Places	India.
Around the World—1st Book	Stella Carroll.
Stories of Other Lands	Jahonnot.
The World and Its People	Dunton.
Shakespeare's Works—Vol. III, IV	
First Days in School	Stewart.

Rural One-Room House in Marion Township, Jennings County, Built 1902. W. S. Lett, Trustee.

Sanitary in every respect. Heating, lighting and ventilating *ideal*. Cost $1,070.

Fig. 42.

Our Little Books for Little Folks	Crosby.
History of Indiana—Vol. I, II	English.
Stories of Heroic Deeds	Jahonnot.
Rural Letters	Willis.
The Siege of Derry	Charlotte Elizabeth.
Cyr's Primer	
Baldwin Primer	
Baldwin Second Reader	
Pictorial Atlas of the World	Rand-McNally.

The librarian of the State Normal School, Mr. Arthur Cunningham, having examined the above list of books, says: "I found seventy-one volumes, which might be classed as follows:

Poetry, 6 volumes; fiction, 36 volumes; fables, 4 volumes; religion, 1 volume; natural science, 8 volumes; geography, 4 volumes; biography, 4 volumes; history, 8 volumes.

In general the books have been quite well selected, considering the needs of the children, but it is evident that there is not a sufficient number of booke on any of these subjects, with the exception of fiction. The duplication of certain books for systematic class use is certainly desirable. And it would be well to round up the collection somewhat by adding at least from fifty to a hundred volumes on the following subjects, which are not now represented;

Practical ethics: Character, conduct of life, success, etc.

Civics.

Mythology and folklore.

Astronomy.

Fine Arts: drawing, painting, architecture, etc.

Games, sports and amusements.

Foreign literature.

European history.

The history of the old township libraries in this State is a record of mismanagement, misuse, neglect and dissipation. Mr. Dunn in his monograph on "The libraries of Indiana" makes this significant statement, which should be as a lamp to our feet and a light unto our path: "Left without any support whatever, the libraries were of necessity doomed to continual deterioration. No new book could be added except by donation. When a book wore out it could not be replaced. If the binding came off, it could not be rebound. Then, aside from the material deterioration, a public library is always on the retrograde in usefulness if it be not growing. People who wish to read finish such books as they care

for, and then, having no further use for the library, take no further interest in it. It gradually drops out of sight. What difference does it make if the one, who is burdened with the care of the library, boxes it up and stores it in his cellar? What, even if he loan the books to his friends and make no pretense of seeing that they are returned? Who cares? The township libraries died of starvation and neglect, and care must be taken that history does not repeat itself in the management of school libraries."

The County Superintendent should keep a careful inventory by author, title and imprint of all books entrusted to a teacher, and the teacher should make an annual report to the County Superintendent of the library's use, condition, losses, etc., with suggestions as to its improvement. All books needing repair should be withdrawn from use and returned to the Superintendent.

The books should be labeled and indelibly stamped as property of the schools, and under no circumstances should a book be used until it is so identified.

To bring about the highest usefulness of even a small collection of books it is necessary that some sort of a simple classification be adopted, and I would suggest that the briefest form of the Dewey system be used, which can be expanded from time to time to meet the growing needs of the library. This will give but ten classes at the start. A card may be obtained of the Library Bureau, showing the ten classes and the ten divisions of each class. The number of the class to which a book belongs should be indicated on the upper part of the Denson label posted on the back of the book. On the lower part of the label there should be plainly printed either an abbreviation of the author's name, or, better still, the symbol obtained from Cutter's Author Table. Further ideas in the mechanical preparation of the library will be found in Plummer's "Hints to Small Libraries," or in Dana's "Library Primer," one of which should be the property of every public or school library, however small it may be.

A code of rules governing the use of the books should be posted on the inside of the cover.

If the teacher herself is unable to give the library the necessary immediate care, she should at the beginning of each school year appoint as her assistant the most mature and trustworthy student of the school to take charge of the routine work. This student

should be required to report, as often as may seem necessary, any delinquencies or infraction of the rules.

In the selection of books for school libraries one or more of the following lists will be found helpful:

Hardy, G. E. Five Hundred Books for the Young. Scribner.

Lawrence, I. Classified Reading. Published by the author, Normal School, St. Cloud, Minn.

Griswold, W. M. Descriptive List of Books for the Young. Published by the author, Cambridge, Mass.

Prentiss, M. H. References to Books Intended to Aid Third Grade Teachers. Cleveland, Ohio. Public Library.

Buffalo Public Library. Classroom Libraries for Public Schools. Printed for the Library.

Michigan. Bibliography of Masterpiece Reading in Grammar Grades. Apply to the State Superintendent, Grand Rapids, Michigan.

Wisconsin. List of Books for Township Libraries. Apply to the State Superintendent, Madison, Wisconsin.

Sargent, J. F. Reading for the Young. Library Bureau, Chicago, Illinois."

The apparatus consisted of one good set of well preserved political maps in a case; a political map of Vigo county, Vermillion and Parke counties, the United States and the World, somewhat out of repair, and a globe in the same condition; one of those artificial highly colored worse than useless charts so often found in rural schools; and an unabridged dictionary and holder, and a few other minor pieces.

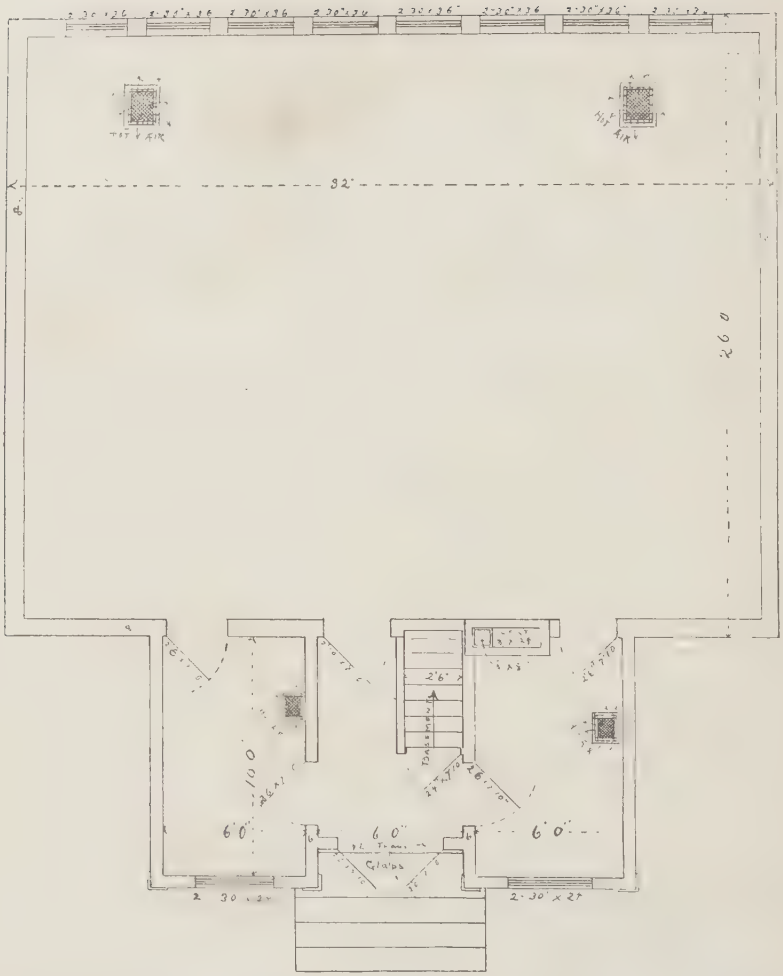
The blackboard was of slate and somewhat out of repair.

As to possessions in the way of pictures, the following only were found, all being inartistic and of the grade of cheap chromos:

The Good Shepherd; a small colored picture of George Washington, and a highly colored picture of a lady in full dress.

Prior to the agreement no janitor was employed. The work of attending to the fires and of keeping the room in order was done either by the teacher or by some boy attending the school. In the latter case a small sum was paid for such services by the teacher.

Since the organization of the school as a training school, the fence has been carefully repaired and whitewashed, the arrangements for heating have been changed, the room now being heated



Floor Plans, One-Room School Building, Marion Township, Jennings County, Indiana.

Cost of Building, $1,070.

Fig. 43.

according to the "Gravity System." The arrangement for this work is shown in the accompanying plan.

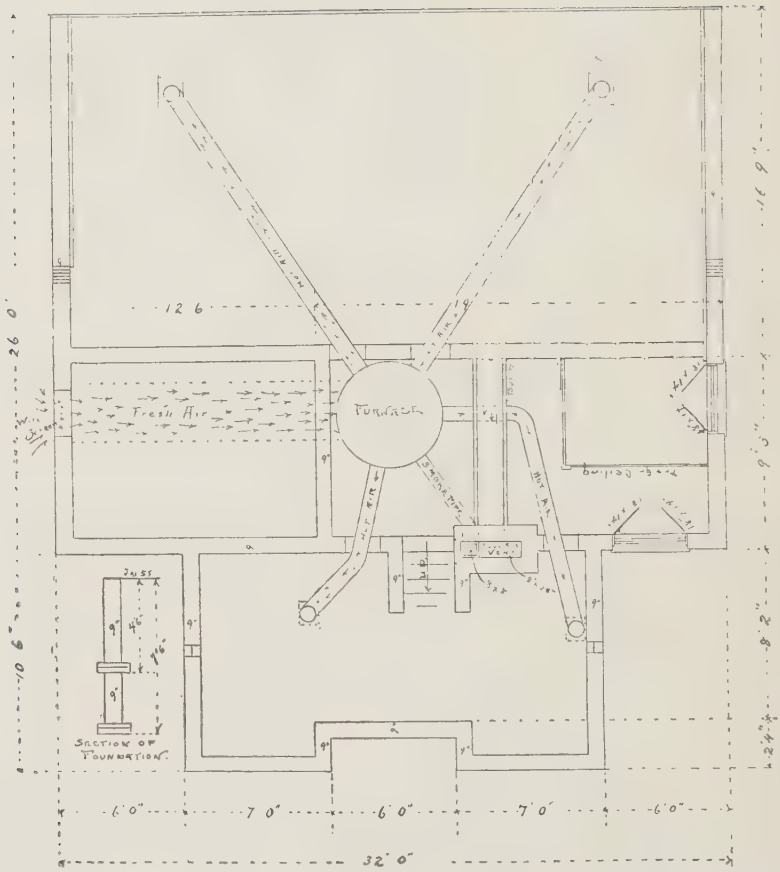
When the fire is built in the stove, the fresh air inlet and registers in the floor are closed and the three slides in the lower part of the steel jacket which surrounds the stove are opened. The cold air is taken from the floor of the room, heated and discharged at the top of the stove. When the proper temperature is obtained, the slides in the jacket are closed and the fresh air inlet and registers are opened. The fresh air from without, after passing between the hot stove and the jacket, ascends to the ceiling, diffuses and passes to all parts of the room. As this warm air is followed by other waves of hot air it descends to the floor, passes through the registers and after sweeping across the floor of the room from the under side ascends through the foul air flue to the outside.

By this system all parts of the room are evenly heated and a supply of fresh air is obtained without the opening of windows or doors.

The passage of the air from the room through the registers and across the house under the floor in its course to the foul air flue warms the floor from underneath, so that the room is comfortable with a smaller fire than is the case where this system is not used. The saving in the cost of fuel and stoves, due to this fact, will, in a few years reimburse a township for the expense of equipping the house with this system.

The important and most expensive parts which will be required in remodeling a house so that the "Gravity System" may be used are a double flue and a steel jacket for the stove. The fresh air inlet and registers are inexpensive and the cost of closing all openings in the foundation will be small. The entire cost need not exceed forty dollars.

The house has been well painted upon the exterior and interior by skillful painters, all necessary repairs to the window panes done by skillful glaziers, and the windows protected by good wire screening. The room has been artistically repapered by paperhangers well qualified to select and arrange the paper in harmony with the requirements of the room; good slate blackboarding has been provided, more complete and better accommodations for hats, cloaks, dinner buckets, etc., have been provided; the outbuildings for the girls and for the boys have been completely separated and



GROUND AND HEATING PLAN OF ONE-ROOM SCHOOL HOUSE, MARION TOWNSHIP, JENNINGS COUNTY, INDIANA.

Cost of Building, $1,070.

Fig. 44.

surrounded by fence screens; the old desks that were scarred and out of repair have been replaced by new desks; in so far as necessary, and all of the desks have been adjusted in size to the sizes of the different pupils. The teacher has been provided with a larger and more convenient table and three new chairs. Four new settees, a Wernecke bookcase, and a good, large clock have been secured. The facilities for lighting the room have been improved by the purchase of a large hanging lamp for the center of the room, the supplying of necessary chimneys and a smoke bell for each lamp.

The following books have been added to the library:

A Journey to Nature.....Mowbray.
Raftmates.....Kirk Monroe.
Under the Great Bear.....Munroe.
We Win.....Hamblem.
History of the World.....Dr. H. T. Helmolt.
Johnston's Universal Encyclopedia, 8 vols.
A Year in Yawl.....Russel Doubleday.
In the Days of Audubon.....Butterworth.
Heroes Tales of American History.....Lodge and Roosevelt.
First Across the Continent.....Noah Brooks.
Seven Great American Poets.....Beatrice Hart.
John Paul Jones.....Brown.
Viking Tales.....Hall.
Robin Hood.....Pyle.
True Tales of Birds and Beasts.....Jordon.
A Short History of England.....Parmele.
Four American Inventors.....Perry.
Stepping Stones to Literature, Book I, 8 v.
Stepping Stones to Literature, Book II, 8 v.
Ivanhoe.....Scott.
Geographical Readers.....King.
Economy.....Marden.
A B C of Electricity.....Meadowcroft.
The School Speller and Reader.....Hyde.
The Cricket on the Hearth.....Aiton.
Ethan Allen.....Brown.
The Bears of Blue River.....Major.
Lem.....Brooks.
Wheat and Huckleberries.....Vaile.
Don Quixote.....Johnson.
The Rescue of Cuba.....Draper.
The Story of Jean Valjean.....Wiltse.
Marjorie's Doings.....Paul.
Six Nursery Classics.....O'Shea.
Mother Goose Melodies.....Welsh.
Stories of Pioneer Life.....Bass.
Farmer Brown and the Birds.....Fox.

The Story of Dago	Johnston.
Four Great American Pioneers	Perry.
The Little Colonel	Johnston.
Bimbi	de la Ramée.
Krag and Johnny Bear	Seton-Thompson.
The Story of the Middle Ages	Harding.
The Young Supercargo	Drysdale.
A Daughter of Freedom	Blanchard.
American Inventors and Inventions	Mowry.
A Maid at King Alfred's Court	Madison.
A Reader in Physical Geography	Dodge.
The Story of the Nineteenth Century	Brooks.
James B. Eads	Howe.
Side Lights on American History, II	Elson.
Greek Sculpture	Hurll.
American Literature	Pancoast.
English Literature	Pancoast.
Physical Geography	Davis.
Ten Boys	Andrews.
Civil Government	Wright.
Commercial Geography	
Around the World, I, II, III	
Civil Government of Indiana	Rawles.

So far, only such slight additions as boxes of cubes and peg boards and pegs have been made to the apparatus.

The walls have been provided with a picture railing, and the whole appearance of the room has been much improved by the following pictures of good quality, suitably framed and appropriately arranged: A small picture of a lion's head, a small picture of an elk, two copies of Baby Stewart, a large picture of Whittier, a small copy of the Madonna, and The Transfiguration, by Raphael.

In addition to this, the entire premises have been placed under the charge of a capable janitor, who, living in the immediate neighborhood, gives all necessary attention to the heating, cleanliness of the room, and the orderly keeping of the yard.

The students who take observation and practice during a given term in the rural training school make a careful study during the same term of the rural school problem as it has been presented and discussed at the various state and national educational associations, and in the various reports of the state superintendents of Indiana. They also, during the same term, visit the other country schools of the township and county, making a study of their programme, course of study, equipment in the way of library, furniture, ap-

paratus, etc.; the conditions of the house, yard, coal house, outbuildings, etc. They also during the same term have a period for observation in the regular training school situated in the normal school building.

By comparing and contrasting the work of the city training school and of the other country schools of the township and county, with that of the rural training school, it is hoped to give the student a conception of the improvement that may be made in the processes of teaching, in programme, in course of study, in the neatness of house and yard, in the equipment of library, in the selection of furniture, etc. It is the intention to show that, without undue expense, every trustee could give to every school in the State a perceptible and important improvement in all of these respects.

In addition, it is the intention to do everything possible to give to the pupils and to the patrons of the school a just pride in its work, in its equipment and in the neatness of the surroundings, and also to interest both pupils and parents in the peculiar problems belonging to the environment of a country school.

Professor Louis J. Rettger, of the department of Biology in the State Normal school, says:

"It is believed that such a school has peculiar advantages above those of the city school, in the study of certain problems which have to do with the physical and biological environment of the pupil from the country. In the city many lines of nature study are seriously handicapped by the lack of available material. Even the interest for such study is in part lost, being swallowed up in the many other questions which are more strictly urban in their derivation. In the country school, however, an inexhaustible supply of material is right at hand. The home-farm multiplies the problems of study immediately available. In fact, many of the problems are the leading questions on the farm and their further study in the country school would join home and school together in a common interest such as few other lines of study could do. The enlisting of this interest of the home would aid very efficiently to deepen the interest in the entire school, and would go to related lines of study.

"The trees of the field and forest lend themselves admirably for study. They are everywhere perhaps easily reached. Their study

Township Two-Room House, Built 1901. J. A. Ross, Trustee. Jennings County, Indiana.

Cost complete with furnace, $3,300.

Fig. 45.

is possible at all times of year, even when the leaves are shed, although there is ample time in the school year to study them while still in leaf. The meager knowledge possessed by most students when they reach their first work in botany, shows that this line would not be beating over an already known ground. The poor selections often made for shade trees shows that a first-hand knowledge of the commoner trees of the woods would not only be a source of continued pleasure, but also of direct practical value.

"A study of the commoner weeds would be in place. The most striking laws of botany are not those found in rare specimens. The very fact that some plants are rare argues that they have not been able fully to meet the demands asked of them. The common plants are the plants which have best solved biological conditions and which best exhibit botanical laws. The very question asked concerning each common weed, 'What makes it so common?' would be to start the pupil of the country on one of the richest paths of inquiry. It would give meaning to every roadside. It would arrest his interest at every corner of the field. It would speak to him with ever new suggestions at every turn. But it might also have a practical value that would still more enlist the sympathy of the home. It might point out the obnoxious and dangerous weeds and present methods for their destruction deduced directly from their life histories. If to the study of the larger weeds were added the study of some of the simpler forms of plants, the pupil might learn in the school in a way to understand intelligently what on the farm was guesswork or haphazard knowledge. It might be a matter of direct practical benefit to the country pupil to know the life histories of the common blights, rusts and smuts which play such havoc now and then with the farm's output, and which are to be dreaded at all times lest they become epidemic. What sanitation has done for cities, sanitation applied to plants may do for the crops of the farm.

"But not the plant world alone lends itself to ready study in the country school. The animal world is equally available. The birds are perhaps for evident reasons best suited. Considerations of humanity, as well as utility, urge desirability of such study. What birds are really injurious, but still better, what birds are of direct value to the farmer would be proper questions of study. A systematic study of the kinds of birds common in the community,

of the foods they live upon, of the habits of nesting and flight, would result in the common enlistment of the interest of the school and community in the preservation of our birds, and would check perhaps as nothing else the unwonted 'Slaughter of the Innocents.'

"What is true of birds applies to other forms. A knowledge of the commoner snakes, of the toads and of frogs and other harmless creatures, would not only interest the pupil anew in forms he will continually meet, but show him that instead of enemies they are his constructive friends. In the insect world itself, which peoples every farm with millions of forms, the injurious ones could be pointed out and their cycle of life studied in order to more effectively resist them, while the myriads of harmless ones might contribute to that pleasure which would come from knowing fairly intimately the many forms of the flora and fauna of the farm, which, with the farmer, try to make a living on the same."

INDEX.

Page

Amount paid Town and City Trustees.....288, 294, 575, 640
Arbor and Bird Day Program.....23, 172
Arbor Day Proclamation 173
Association, County Superintendents' State..... 467
Association, Northern Indiana Teachers'..... 458
Association of City and Town Superintendents, The..... 463
Associations and Institutes 449
Associations, County 469
Association, Southern Indiana Teachers'..... 456
Association, State Teachers'..... 449
Attendance, Enrollment and 242, 292, 572, 601
Audubon, John James 213
Audubon Society, The 24, 209

Bibliography of Nature Study 125
Bird Day Program, Arbor and.....23, 172
Birds 214
Books for High Schools, List of..... 675
Buildings erected 272
Butler, Amos W.....148, 432

Child Labor 438
Circles, Indiana Reading 441
City and Town Superintendents, The Association of..... 463
Commissioned High Schools, Cost of..... 690
Commissioned High Schools, Course of Study for..... 657
Commissioned High Schools, List of..... 681
Common School Fund, 1901.....223, 230, 290, 589
Common School Fund, 1902.....570, 584
Compulsory Education 409
Compulsory Education Law 411
Compulsory Education, Statistics Concerning..... 416
Condition Common School Fund, 1901-2..... 589
Congressional Township Fund.....226, 232, 290, 570, 586, 591
Cost of Commissioned High Schools..... 690
Cost of Noncommissioned High Schools.....650, 688
Counties, Tables by..... 584
County Associations 469
County Institutes 470, 481, 576
County Superintendents, Letters from..... 297

Page
County Superintendents' State Association 467
Course in Nature Study for the Common Schools 87
Course of Study for Commissioned High Schools 657
Crime, Education and 432

Economy, School 154
Educational Progress? What shall be Indiana's Next Steps in 141, 167
Education and Crime 432
Education, Compulsory 409
Effects of Enforcement of Truancy Law 426
Enrollment and Attendance 242, 292, 572, 601
Enumeration 240, 292, 572, 599
Equal School Privileges for all Children ..... See Introduction.
Examinations 484
Expenditures for the Maintenance of Schools, Receipts and 260, 616

Freeman, W. H. 177
Fund, 1901, Common School 223, 230, 290, 589
Fund, 1902, Common School 570, 584
Fund, Congressional Township 226, 232, 290, 570, 586, 591
Funds, 1901 ..... 223, 226, 230, 232, 290

Geeting, David M. 165
General Statement 645

Hamilton, Robert I. 167
High School Inspection 647
High Schools 643
High Schools, Cost of Commissioned 690
High Schools, Cost of Noncommissioned 650, 688
High Schools, Course of Study for Commissioned 657
High Schools, List of Books for 675
High Schools, List of Commissioned 681
High Schools, Special Illustrations of Township 714
High Schools, Statistical Information on Township 712
High School Statistics 648, 686
High Schools, Teachers and Wages in 692
High Schools, Township 709
High Schools, Wages of Teachers in 654
High School Teachers, Professional Training of 695

Illiteracy in Indiana 435
Illustrations of Township High Schools 714
Indiana Reading Circles 441
Indiana's Next Steps in Educational Progress? What shall be 141, 167
Indiana State Normal School, The Rural Training School of the 763
Individual Opinions of the Truancy Law 424
Inspection 647
Institutes 284
Institutes, Associations and 449
Institutes, County 470, 481, 576

Page
Institutes, Law Concerning Township....4, 71
Institutes, Number of Township....284, 663
Institutes, Township....483, 576
Institute Work, Outline of Township....3, 69

Law, Compulsory Education....411
Law Concerning Township Institutes....4, 71
Law, The Township Institute....483
Length of School Term....278, 574, 630
Letters from County Superintendents....297
Libraries and Reading Circles....280, 294, 574, 632
Licenses....546
Licenses, Sixty Months' State....561
Life State Certificates, Professional and....546
List of Books for High Schools....675
List of Commissioned High Schools....681
Local School Conditions....295

Maintenance, School....260, 580

Nature Study, Bibliography of....125
Nature Study for the Common Schools, A Course in....87
Noncommissioned High Schools, Cost of....650, 688
Northern Indiana Teachers' Association....458
Number of Schoolhouses....244, 276, 293, 573, 603, 628
Number of Teachers Employed....246, 293, 573, 605
Number of Township Institutes....284, 576, 636

Operation of Truancy Law....424
Outline of Township Institute Work....3, 69

Parental Home....414
Proclamation, Arbor Day....173
Professional and Life State Certificates....546
Professional Training of High School Teachers....695
Program of Arbor and Bird Day....23, 172

Qualifications of Teachers....See Introduction.

Reading Circles, Indiana....441
Reading Circles, Libraries and....280, 294, 574, 632
Receipts and Expenditures for the Maintenance of Schools....260, 616
Recommendations....See Introduction.
Reforms....148
Revenue, January Distribution, 1901, Tuition....234, 291
Revenue, January Distribution, 1902, Tuition....593
Revenue, July Distribution, 1901, Tuition....236, 291
Revenue, July Distribution, 1902, Tuition....595
Revenue, 1901, School....234, 236, 291
Revenue, 1902, School....571, 593
Revenue, 1901, Special School....238, 291

Page
Revenue, 1902, Special School 597
Rural Schools, The 625
Rural Training School of the Indiana State Normal School 763
Sandison, Howard 141
School Conditions, Local 295
School Economy 154
School Fund, 1901, Common 223, 230, 290, 589
School Fund, 1902, Common 570, 584
School Funds, 1902, The 570
Schoolhouses, Number of 244, 276, 293, 573, 603, 628
School Inspection, High 647
School Maintenance 260, 580
School Revenue, 1901 ..... 234, 236, 291
School Revenue, 1902 ..... 571, 593
School Revenue, 1901, Special 238, 291
School Revenue, 1902, Special 597
Schools, Cost of Commissioned High 690
Schools, Cost of Noncommissioned High 688
Schools, Course of Study for Commissioned High 657
Schools, High 643
Schools, List of Books for High 675
Schools, List of Commissioned High 681
School Statistics, 1901 222
School Statistics, High 648
Schools, Teachers and Wages in High 692
Schools, The Rural 725
Schools, Township High 709
School Term, Length of 278, 574, 630
Sixty Months' State Licenses 561
Southern Indiana Teachers' Association 456
Special Illustrations of Township High Schools 714
Special School Revenue, 1901 ..... 238, 291
Special School Revenue, 1902 597
State Certificates, Professional and Life State 546
State Licenses, Sixty Months' 561
State Teachers' Association 449
Statistical Information on Township High Schools 712
Statistical Summaries for 1901 290
Statistics Concerning Compulsory Education 416
Statistics, 1901, School 222
Statistics, 1902, School 567
Statistics, High School 648, 686
Summaries 288, 570
Superintendents and Teachers of Indiana, To the 176
Superintendents, Letters from County 297
Superintendents' State Association, County 467
Superintendents, The Association of City and Town 463
Supervision 163, 576
Symposium 141

Page
Tables by Counties 584
Teachers and Wages in High Schools..... 692
Teachers' Association, Northern Indiana..... 458
Teachers' Association, Southern Indiana 456
Teachers' Association, State 449
Teachers Employed 246, 293, 573
Teachers in High Schools, Wages of..... 654
Teachers of Indiana, To the Superintendents and..... 176
Teachers, Professional Training of High School..... 695
Teachers' Reading Circle 443
Teachers, The Training of..... 165
Teachers' Wages 248, 252, 256, 573, 580, 607
Township Fund, Congressional 226, 232, 290, 570, 586, 591
Township High Schools..... 709
Township High Schools, Special Illustrations of..... 714
Township High Schools, Statistical Information on..... 712
Township Institute, Laws Concerning 4, 71
Township Institutes 483, 576
Township Institutes, Number 284, 576, 636
Township Institute Work, Outline of.....3, 69
Training of High School Teachers, Professional..... 695
Training of Teachers, The 165
Trees of Indiana 178
Truancy Law, Operation of 424
Truancy Law, Statistics Concerning..... 418
Truant Officers 411
Trustees, Amount Paid Town and City.....288, 294, 575, 640
Tuition Revenue, January Distribution, 1901.....234, 291
Tuition Revenue, January Distribution, 1902..... 593
Tuition Revenue, July Distribution, 1901.....236, 291
Tuition Revenue, July Distribution, 1902..... 595

Van Matre, Chas. A..... 163

Wages .....Introduction and 248, 252, 256, 573, 580
Wages of Teachers, 1902, Average Daily..... 573
Wages of Teachers in High Schools.....654, 692
What shall be Indiana's Next Steps in Educational Progress?.....141, 167

Young People's Reading Circle 443